THE MEDICAL NEWS.

A WEEKLY JOURNAL OF MEDICAL SCIENCE.

VOL. XLI. SATURDAY, SEPTEMBER 30, 1882. NO. 14.

ORIGINAL LECTURES.

THE BACILLUS TUBERCULOSIS.

A Lecture delivered, by invitation, on September 18, before the College of Physicians of Philadelphia.

BY JAMES T. WHITTAKER, M.D.,

PROFESSOR OF THE THEORY AND PRACTICE OF MEDICINE IN THE MEDICAL COLLEGE OF OHIO, CINCINNATI.

(Reported for THE MEDICAL NEWS.)

OUR definite knowledge regarding tuberculosis dates from the day when experiments were first made to prove the specificness of the disease. We all remember well what a kind of thrill went round the medical world when Villemin, in 1865, first announced that he could inoculate the disease by means of tuberculous virus. We recall, too, the numbers of experiments which were performed at once with conclusions, some in confirmation, some in refutation, of his views. Chief among the opponents of them at this time was Cohnheim, who, with many others, stoutly maintained that he could produce the disease by the inoculation of other kinds of matter, even with wholly innocuous and inorganic matters, like elder pith, India rubber, etc.; in short, with anything that would produce irritation and caseation, which latter process came to be looked upon as a *sine quâ non*. Hereupon followed the doctrine of caseous pneumonia, a process secondary to catarrhal or croupous pneumonia in a vulnerable subject, and the sequence was catarrhal pneumonia, caseous pneumonia, phthisis. But the pathologists soon saw that neither catarrhal nor croupous pneumonia was wont to result in caseous pneumonia, and that, while phthisis was a disease so common as to carry off one-third of the productive population, neither of the so-considered causative affections occurred in sufficient frequency. Buhl then described a desquamative pneumonia, a form different from any other, whose business it was, as it were, to result in caseous degeneration. The pathology of tuberculosis now became involved in the hazy mists of clinical speculation.

The next direct observations were made in the experiments of Tappeiner, who saw that dogs, which naturally enjoy great immunity, became tuberculous when forced to breathe enclosed in boxes containing atomized tuberculous matter. These simple and striking experiments were variously repeated again with contradictory results. But the idea of specificness was thus launched again, and very soon thereafter when the oculists began to produce the disease by the inoculation of tuberculous virus in an organ where the whole process of development could be seen by reason of the translucency of its structure, the bulk of evidence was in favor of regarding tuberculosis as a specific disease. Cohnheim and Salomonsen now published the results of their inoculation experiments upon various animals, arriving at the conclusion that tuberculosis could be produced in no other way than by the introduction of tuberculous matter. Not the presence of giant-cells, the formula ran, not the process of caseation characteristic of disease, but solely the capability of inoculation. Thus there was gradually evolved the fact of the specificness of the disease, so that by the beginning of this year the doctrine had deepened into a general conviction.

Then so soon as this prime factor was acknowledged, the idea was naturally awakened, or rather reawakened, of the presence of a *contagium vivum*. Klebs, who is always first in this field, in point of time at least, described the actively-moving *monos tubercolosium* (bacterium). Schüller and Toussaint followed with micrococci, and Aufrecht followed them with two forms, one for scrofula, one for phthisis, one a micrococcus and one a bacillus. There was no satisfaction in these discoveries, which rested simply upon microscopic appearances, and they soon took their place silently among the list of the lost. By the beginning of this year Cohnheim was still able to say, "The principle of the infection in tubercular affections still remains a problem unsolved."

How Koch solved this problem is a matter of history already in the short time which has elapsed between April 10th, the date of his first publication, and the present day. He had already made fame in an obscure country town with his researches upon surgical infection, erysipelas, and milzbrand. But his reputation was chiefly confined to his co-workers, whose attention soon became fixed upon him on account of the accuracy of his observations and the precision of his statements. The recurrence of a particular form of bacillus under the same conditions of investigations concerning tuberculosis soon convinced him that he had something more to deal with than a mere accident or coincidence. The same means were at hand which had been adopted with such success in isolating the bacilli of milzbrand, and the principle of the solid culture soil was modified to secure the development of the bacillus tuberculosis. In this way he soon arrived at the conclusion that he had to deal with a special form of parasite, and the question only was as to its exact relationship to the disease. But first let us speak of the anatomy or morphology of the new discovery.

The bacillus tuberculosis is rod-shaped, hence its name, varies in length from $\frac{1}{1200}$ to $\frac{1}{3000}$ inch, is *absolutely motionless*, produces spores, 2-4, in the body, and is blunt at both ends. It is present in greatest abundance where the disease is in most rapid progress, and may be absent where the disease has ceased to spread. It is found in the interior of the so-called giant-cells, which are in reality but capsules for it, like the capsules of trichina.

But no one, certainly not Koch, would claim to differentiate a bacillus by its gross physical appearance. Milzbrand is easily distinguished from tuberculosis by the fact that its bacilli are pointed at each end, while the bacillus tuberculosis is rounded or blunt; but such differences are of value only when both bacilli are present for comparison. The spirochates of recurrens are distinguished at a glance, because they are spiral and not straight—because they are, in fact, not bacilli (rods) at all. The bacilli of mouse septicæmia are distinguished at a glance because of their extreme minuteness, and the bacilli of rabbit septicæmia are distinguished, because they are more like bacteria than bacilli, that is, they are more elliptic than linear. But these distinctions are of value only in the mycological laboratory, where they all occur with equal frequency, and would not interest us as clinical practitioners. So far as concerns morphology alone, the various bacilli are at the first glance very much alike, often so much alike as to be indistinguishable; but in this respect they are not unlike many other microscopic structures, say the spermatozoids,

which are apparently very much alike, and yet are very different.

But if the bacilli do not differ much to coarse inspection, so to speak, do not differ much in their anatomy, they do differ widely in their chemistry, which brings us to speak at once of the color tests; for the action of the coloring matters upon the bacilli is an expression of their chemical affinities. And here we find very great differences among the different bacilli. Pretty much all the micrococci can be tinted of any color indiscriminately, blue or red or brown, etc., but the bacilli show marked preferences for, or perhaps only become visible with, the use of certain hues. In the case of the bacillus of tuberculosis, for instance, the specimen supposed to contain it must be first tinted, then decolorized and tinted again, to bring it out with definiteness and distinctness. The bacilli of lepra, which closely resemble those of tuberculosis, can be colored only when fresh, not after desiccation; but hardened in alcohol they may be colored for years with gentian-violet or fuchsin. The spirochates of recurrens can be colored properly only in blood, but not in the tissues, with fuchsin, methyl-violet, or gentian. In section they can be colored only with aniline-brown.

I may best serve the purpose of my invitation here, I think, if I confine myself as closely as possible to the text presented, the bacillus tuberculosis, and I construe the occasion to mean a demonstration rather than a declamation. I have therefore had drawn merely as a means of coarse comparison the various sketches of micro-organisms of which I have spoken, and which I now exhibit, and having shown them, proceed to the clinical demonstration of the bacillus tuberculosis in the sputum.

This specimen of sputum, which answers to the old classical description *sputum rotundum fundum petendum*, I picked up in the hospital, or rather it was kindly given to me by an interne, Dr. Devlin, as taken from the cup of an advanced case. I have already prepared a specimen from it which I have here, and I proceed to repeat every step of the process necessary to its exhibition before you, commencing with the raw material. I select a small fragment of the sputum, and spread it with a knife as thin as possible over pretty much the whole surface of a cover-glass. The next step is to fix it, for if we should accidentally omit to fix it, we should have the albumen precipitated in forms which would puzzle the most profound mycologist. We may fix it, if we please, with glycerine-brown, a solution of analine-brown in glycerine, and for photographic purposes this is the best procedure, but for ordinary quick demonstration we fix it best by heat. I pass it therefore, two or three times through the Bunsen's jet, specimen side up, of course, taking care not to hold it in the flame lest it be burned up. The specimen is now fixed; it is dry, as any one may see, but it is not burned.

I have here now upon the table all the crude materials for the manufacture of the color-tests in common use. First is the bottle of aniline oil, a dark amber-colored fluid, and next is methyl-violet, which we select because it gives us the quickest results. The aniline oil mixed with distilled water, and allowed to stand four or five hours at least, with occasional agitation, gives us this soapy-looking fluid, which is labelled "the aqueous solution of aniline oil." The methyl-violet powder dissolved in alcohol, gives us this concentrated alcoholic solution of methyl-violet, and these two solutions mixed, in the proportion of one hundred grammes of the first to eleven grammes of the second, give us this deep violet, in thin layers iridescent, fluid which constitutes what we might call the first color. Several watch glasses having been half-filled with the first color, we let fall upon the surface of each, taking care that each rests upon, and does not sink below, the surface, a cover-glass with the specimen of sputum. We select several specimens because we might fail to find the bacillus in any one. Here now the specimens rest for half an hour, while we take up another portion of our subject.

Let us suppose that we will find in our preparation some specimens of the bacillus tuberculosis, or at least take it for granted that we can find it in most specimens of phthisical sputum, or in sections of tubercular structure; and on this subject there is now no doubt; the question at once arises as to the significance of the bacillus. The bacillus need not necessarily be the cause of the disease, any more than any one of the numerous micro-organisms found in the stools need be the cause of typhoid fever. In other words, presence does not imply pathogenesis. Koch might have felt convinced that he had found in this bacillus the cause of tuberculosis, but he would not be able to convince others to that effect unless he could produce tuberculosis with the bacillus. And that is what he did. But he had at first to isolate the bacillus from everything else. Koch had already effected this isolation of individual germs in other diseases, notably in milzbrand and forms of septicæmia, and he at once undertook to grow the bacillus upon the same soils. He soon found, however, that the bacillus would not grow, or would not grow well enough, upon any of these culture substances, and then he commenced to prepare for it its own native soil, the soil to which it is indigenous, so to speak, viz., blood. One might almost consider this thought as an inspiration of genius if it were not so strictly common-sense. The problem was, then, not to get a solid substance out of blood, for any one could do that in the process of coagulation, but to get a substance that would keep and would be clear. Sterilization and solidification at the same time were the factors sought. With the patience of science, he worked this problem out. Having drawn fresh blood into a perfectly clean vessel, he allowed it to stand absolutely at rest for twelve hours, when he withdrew into glass pipettes, previously sterilized by heat, the supernatant serum, and let it fall into test-tubes likewise purified and closed with plugs of sterilized cotton. These tubes were now subjected to a temperature of 58° C., one hour a day for six days, when full sterilization is effected, as proved by the fact that the blood will keep for months or years if the plug be not removed. Then solidification is effected by raising the temperature to 65° C., always in a water-bath, of course, withdrawing the tube from time to time to observe the period of gelatinization. Thus prepared, the tubes are inclined sideways somewhat, to offer a larger surface simply, and the bacilli, best from a tuberculous deposit in an animal artificially inoculated with the disease, are inserted upon the surface of the prepared blood. In other words, the seed is sown. For a week nothing is observed. At the end of ten days, however, a scaly appearance begins to show itself, the scale as it grows lifting itself from the subjacent soil and curling up upon itself like an old epidermis cell. It is very friable and is very easily detached, in which regard it differs widely from other micro-organisms, from milzbrand, for instance, which goes down into the substance of the soil as a film or cloud and gradually invades the whole mass. This scale upon the surface of the blood is the tuberculosis itself. A fragment of it put under the microscope is seen to be composed wholly of bacilli. It may be dissolved in fresh glycerine and injected, or it may be inserted with a needle or platinum wire and thus inoculation is effected. The wound heals in a day, leaving no trace, but in about two weeks the nearest lymphatic gland enlarges; in a few days more other

glands are affected and the animal begins to emaciate; in short, to present the general signs of tuberculosis. Now it may be allowed to die of the disease or it may be killed at any time and examined, when the organs present the picture of tuberculosis in degree corresponding to the amount injected. All these things have been so faithfully rendered before that I do not dwell upon them save to remark that while some animals, notably the dog and the rat, enjoy comparative immunity against spontaneous tuberculosis, there is no immunity to the artificial disease.

But this very fact of immunity and liability is an argument for the specificness of the disease. Thus the minute bacilli of mouse septicæmia kill house-mice but not field-mice. The bacilli of milzbrand kill mice, but not rats. The bacteria of rabbit septicæmia are always quickly fatal to rabbits and mice, and may be communicated to sparrows and doves, but do not affect guinea-pigs and rats. Age plays the *rôle* in these experiments, for which we are prepared by clinical observations concerning the acute infections. Thus milzbrand will affect young dogs and rats, but not older animals. Perhaps the most singular action in this connection is observed in mouse septicæmia, the bacilli of which kill young rabbits, but produce only a local affection or inflammation, a kind of erysipelas, in old rabbits.

We proceed now with our experiment. We observe, as we lift the cover-glass from its methylene bath, that the preparation is deeply stained. We shake off the superfluous color and immerse the specimen in the decolorizing solution, which consists of nitric acid (German pharmacopœia) one part to distilled water two parts, by volume. Moved about in this fluid, the color quickly disappears. Held between the eye and the light, the specimen looks almost colorless; but in washing off the superfluous acid, under a small stream of distilled water, it is seen that a faint tinge of color returns. The specimen is now ready for the second color, the concentrated aqueous solution of vesuvin, which colors all the field brown. One drop of the recently filtered, but still quite thick, solution is let fall upon the cover-glass while it is tipped about to diffuse it over the whole field, the cover-glass is pressed upon the slide, and the examination for bacilli commences. As we have already a preparation showing them in this specimen, we need waste no time in looking for them now.

Having said something of the color and the culture, let us pass now to the subject of control. No one would expect to cure a case of any disease by a mere knowledge of its cause. This is of course the prime factor, and is alone worth all the rest. But our knowledge of the bacillus tuberculosis is still too new for any consideration of agents destructive to the parasite. Nor is it probable that any such agent will be discovered, or will be ultimately necessary. We do not know any agent destructive to the trichina spiralis in the body, and yet the discovery of the trichina has almost put an end to the disease. That is, it has limited it to the ignorant and the careless. He who studies disease from the standpoint of control has a much wider range of intellectual vision than he who looks upon it simply from the standpoint of the common idea of a cure, But the bacillus tuberculosis from the standpoint of control must first be universally acknowledged.

It comes to us then with some points characteristic of it in its morphology, or we might say its anatomy; secondly, it has more definite chemical properties, as shown in its behavior to the aniline dyes; thirdly, it grows only upon a definite soil, different from many other bacilli, hence it has, we might say, speaking of it as of any other vegetable, its own agricultural properties; fourthly, it grows in its own peculiar way; and lastly, supremely important in a differential point of view, it has its own specific, exclusive, physiological properties, as evidenced by the constancy of its action upon pretty much the whole animal kingdom. Is there any other factor in all etiology that comes with stronger credentials? Let him explain it who can, however, the singular psychologic fact remains that every one is willing to admit all things in the case of milzbrand, but not in the case of tuberculosis. Is it, perhaps, because milzbrand so seldom affects mankind?

Koch never rushed into print with his discovery. He studied the bacillus tuberculosis thoroughly before he published the existence of it, and he determined the parasitic nature of it in the very simplest way: by the observation, namely, that it lives only at a temperature between 30° and 40° C. Milzbrand, its congener in so many ways, lives and produces spores in the coldest countries, and we see the worst epidemics of it in Siberia and other lands of the north. But milzbrand is not a parasite in the true sense of the term. The bacillus of milzbrand gets into the body of animals only accidentally, makes a little excursion, the Germans say, when it leaves the field, to be swallowed into the body of a cow. But the bacillus of tuberculosis requires body heat to live and thrive in, and produces no spores even two degrees above or below its natural climate.

So the bacillus tuberculosis is a true parasite, and when we recognize this fact, we almost get possession of it. It is like tracing a wild beast to its lair. The bacillus tuberculosis is not wild. It is motionless, sluggish mostly in its growth, but it is all the more cruel on account of these facts. Desiccation does not kill it, if it be kept sufficiently warm. Koch inoculated guinea-pigs with parasites from desiccated sputum a month old, and nevertheless produced the disease. One of the best of our own mycologists put it well when he said that "the mud of the gutter to-day is the dust of the air to-morrow." It is the sputum which disseminates the disease. In spontaneous tuberculosis the disease always begins in the lungs. Even in cases of basilar meningitis, a careful search will turn out nearly always a caseous bronchial gland as the initial lesion or depot whence is the local or general invasion of the body.

So here we have the clue to the control of the disease, and when the phthisical patient pulls out his sputum-saturated handkerchief, he opens the box of Pandora on the public highways. If I had to make practical response to the query what is the means of absolute control, I would say, in the light of existing knowledge, fire, and fire alone. No kind of bacillus will live in the fire. But a patient with phthisis cannot sit and spit in the fire. In the laboratory at Berlin there are many poisons floating in the air. The air of one of the rooms once became so permeated with milzbrand bacilli that a mouse, which is exquisitely sensitive to it, could not live in it more than twenty-four to forty-eight hours. Yet all the tools and instruments are thoroughly disinfected, that is, freed from germs, by the hot air- or water-bath; or, better still, when adoptable, by the Bunsen's jet. But the glass slides and cover-glasses could not be treated in this way. So there stands upon the table in each room a large glass vessel, holding half a gallon at least, and that much concentrated sulphuric acid is poured into each. Into this vat is thrown every slide and cover and test-tube that has been used, and once a month it is all cleaned out. Perhaps phthisical patients who may not be isolated as yet, as are other cases of a less malignant malady, might be restrained from disseminating the disease by the use of similar smaller portable vessels. But, however it be accomplished, the prime point now in prophylaxis is the recognition of the fact that it is the sputum which chiefly conveys the disease by contaminating our com-

mon reservoir of air. Just now it occurs to me, under the inspiration of this occasion, what many a classical scholar no doubt has thought of here without such stimulus: the disgrace it used to be held to be in the days of ancient Rome for a man to expectorate in public. And with our knowledge of the danger which lurks in the sputum often, how much graver insult it is than a mere breach of propriety, how much deeper offence than a mere disgrace.

ORIGINAL ARTICLES.

COMPLETE OUTWARD DISLOCATION OF THE RADIUS AND ULNA AT THE ELBOW.

BY A. B. ISHAM, M.D.,
OF CINCINNATI, OHIO.

ON the 11th of June, 1882, J. W. F., an insurance solicitor, was at a livery stable, standing at the head of a horse, upon the left side, with the bit-reins grasped in his right hand. The animal gave a sudden rear and spring, throwing Mr. F. forward and sideways with considerable force upon his left side. The gentleman, in his endeavors to get up, then fell head foremost down a hatchway, a height of about eight feet, alighting upon his head and shoulders in a pile of saw-dust. The result of the series of movements was a dislocation outwards of the radius, and outwards and backwards of the ulna. In consequence I was summoned to attend him at his residence, which I reached shortly after the accident, and where I found present Dr. H. T. Lowry, the family physician. The luxation, I should say, was complete. The forearm was somewhat flexed and pronated, and was freely movable at the elbow. The depression in the head of the radius could be plainly felt, and the bone could be rotated on the ulna external to the humeral articulation. The coronoid process of the ulna rested upon the posterior surface of the external condyle of the humerus, with the olecranon process projecting upwards and backwards, entirely external to the olecranon depression into which the finger could be placed. The sigmoid cavity could also be felt just above and internal to the head of the radius. The skin was so tightly stretched over the internal condyle that it seemed as though it must break through, while transversely the joint appeared nearly double its normal breadth. This great breadth, together with the increase in the antero-posterior dimensions of the joint upon the radial side, and the pointed and thinned appearance upon the ulnar side, gave to the elbow a most singular aspect of deformity. It suggested the idea of fracture of the lower end of the humerus with dislocation and twisting outwards of the radius and ulna.

Reduction was accomplished without anæsthetics. Dr. Lowry held the humerus firm, while with one hand I seized the forearm, making movements of extension and flexion, and at the same time with the other hand exerting strong pressure upon the head of the radius and upper part of the ulna from without inwards. After a little rather vigorous manipulation in this way we had the satisfaction of bringing the bones back into their natural positions. Having assured ourselves of the correct apposition of the parts, the limb was fixed in a state of semi-flexion upon an angular wooden splint.

Dr. Lowry had subsequent charge of the case. The splint was kept upon the limb for four days. Of course, after such injury to the joint structures there was considerable inflammation and soreness. The patient, who was very squeamish about the matter of physical pain, would not permit passive movements of extension and flexion to be made, and in such slight movements as he made himself he was very careful not to pass the point of comfort, consequently some adhesions formed, and the arm remains very slightly flexed. He can flex it perfectly, pronation and supination are not interfered with, but he cannot make complete extension of the forearm, although it comes out nearly straight. He is enabled to use it for nearly all purposes that he could before, and in time exercise will undoubtedly extend it thoroughly, though extension might be had at once if he possessed the courage to submit to the moderate amount of effort necessary to break down the slight adhesions.

The position of the coronoid process upon the posterior aspect of the external condyle affords a basis for the opinion that, in this particular instance, the dislocation of the radius and ulna outward first took place in a backward direction. In regard to the mechanism, it is probable that the displacement was brought about by the left arm being thrown out extended, in advance of the falling body, in order to abate the severity of the blow. The palm of the hand, coming in contact with the floor, formed the point for the distribution of the force, which, in its transmission upwards first ruptured the anterior and posterior ligaments, permitting the radius and ulna to be dislocated backwards. The burden of the shock then falling upon the lateral ligaments, these gave way, and the force now being displayed obliquely outwards as regards the long axis of the radius and ulna toward the elbow-joint, the upper ends of these bones were carried external to the lower extremity of the humerus. The first fall is thus likely responsible for all the displacements, although it is possible that only the backward dislocation proceeded from it, while the lateral may have happened from the descent down the hatchway. As to whether or not it was a complete dislocation, depends upon the views one holds as to what constitutes a complete outward dislocation. It could hardly have been more complete without the joint had been wrenched asunder, making a compound luxation. The fibrous investments having given way, the muscles and other soft tissues, already overstrained and compromised, could have scarcely resisted any further tension.

While I looked upon it as an unusual form of injury, no authorities were consulted, and my attention was not drawn to its rarity until Dr. Sieber's report of his case of outward dislocation of the radius and ulna appeared in THE MEDICAL NEWS of August 19, 1882. The complete cases recorded are not numerous, and some of these might have been rendered much more complete by more careful description. Dr. F. H. Hamilton in the 6th and last edition of his work on *Fractures and Dislocations*,

has references to six cases of complete outward dislocation of both forearm bones at the elbow, which he says are all that have occurred in America up to the time of the revision of his book. He has overlooked the cases of Drs. D. Johnston, of Louisville, and J. E. Mears, of Philadelphia; while probably the revision was completed before Dr. W. Ekwurzel, of Philadelphia, reported his case. In all, with my own case, 11 cases have been published up to this time in the United States. The list is appended, that any one who desires it may establish their authenticity:

1. Varick, T. R., *Medical Record*, November 1, 1867, p. 387, referred to by Hamilton.
2. Andrews, Dr., *Medical Record*, October 23, 1875, p. 720, referred to by Hamilton.
3. Wylie, W., *Medical and Surgical Reporter*, March 22, 1879, p. 250, referred to by Hamilton.
4. Osborne, H. B., *Hospital Gazette*, November 29, 1879, p. 613, referred to by Hamilton.
5. Johnston, D., *Medical Herald*, Louisville, 1879–'80, p. 58.
6. Mason, E., *Medical Record*, April 10, 1880, p. 397, referred to by Hamilton.
7. Mason E., *Medical Record*, April 10, 1880, p. 397, referred to by Hamilton.
8. Mears, J. E., *Medical Times*, Philadelphia, November 6, 1880, p. 89.
9. Ekwurzel, W., *Medical and Surgical Reporter*, July 9, 1881, p. 38.
10. Sieber, J. A., THE MEDICAL NEWS, Philadelphia, August 19, 1882.
11. Isham, A. B., THE MEDICAL NEWS, Philadelphia, September 30, 1882.

FOREIGN BODIES IN THE ANTERIOR CHAMBER OF THE EYE.

BY J. SANTOS FERNANDEZ, M.D.,
OF HAVANA.
(*Translated by* A. B. DE LUNA, M.D., of New York.)

FOREIGN bodies in the anterior chamber of the eye are not as frequent as the exposed position of the organ would lead us to suppose. I refer, of course, to substances penetrating into the anterior chamber and occasioning at the time no other lesion than the slight and almost imperceptible solution of continuity of the cornea. A. Tvert[1] speaking of wounds of, and foreign bodies in, the eye-ball, says that the records are few of what may properly be called "foreign bodies in the anterior chamber," and adds that amongst 5,465 patients seen by him in one year (1875), and of whom 342 were classified as "injuries," not a single case was found of the nature under consideration. In Galezowski's clinic I saw only one case during a period of seven consecutive months; while in my own, one is all I can find among the records of 10,000 cases. Desmarres mentions them as exceptional cases, a statement I would not gainsay, inasmuch as the statistics of my clinic, covering 12,000 cases of eye diseases, and a period of seven years, show only the three instances which I proceed to relate.

CASE I.—T. G., a mulatto, æt. 45 years, of good constitution, and by occupation a farm hand, was admitted August 14, 1875. Three days previously, while at work breaking stones, something hit him in the eye, the pain at the moment being so intense that he fell on the ground. On rising, the left eye felt very badly, could not bear the light, and ever since has been the seat, at night, of pain which extends to the superciliary region of the same side. On examination slight hyperæmia of the ocular conjunctiva was found, and three foreign bodies could be seen in the anterior chamber; two of them very small, and none larger than the head of an ordinary pin. Their whitish color strengthened the suspicion that they were fragments of stone. They were lying horizontally across the inferior hemisphere, in the angle between the iris and cornea, and very close to one another. The next question was as to the manner of extraction. A linear section of the superior portion of the cornea and seizure of the fragments from above with the iridectomy forceps is easy enough to plan, but in carrying it out there is danger of injuring the iris, lens, or cornea, without accomplishing the object. On the other hand, sections of the inferior portion of the cornea, in the region corresponding to the location of the foreign bodies, was also dangerous without iridectomy. The latter then was accordingly performed; but the knife had scarcely been withdrawn, when hypæmia occurred, and the foreign bodies were lost to view. Section of the iris now became imperative to insure the certainty of dragging them out; when effected, however, they were not to be seen, being concealed probably by the blood covering the ocular conjunctiva. A cataract dressing was applied and the patient put to bed, where he remained quietly, suffering no pain through the night, and when the dressing was changed the following morning, there was perfect union of the wound. Two days later hardly any vestige of hypæmia remained, and at the end of the week he was discharged, cured.

CASE II.—E. M., a Spaniard, 25 years old, and a workman in the Arsenal, was admitted July 13, 1877, and stated that three days before, while working on steel, a fragment hit him in the right eye, causing pain at the time, and a dimness of vision since then. Simple inspection by oblique light revealed a dark foreign body in the anterior chamber, located towards the inferior portion of the periphery of the iris and cornea. In size it was half a line in thickness by one in length, seemed somewhat adherent to the iris, and the aqueous humor was more opaque at the surface than in the rest of the anterior chamber. An opaque spot on the cornea opposite the foreign body indicated its point of entrance. The operation had to be postponed forty-eight hours, during which period the instillation of atropia was kept up. On the 15th, chloroform was administered, and I proceeded to extract the body by iridectomy at the region of its site, the fragment emerging entangled in the section of iris removed. The dressing already mentioned was applied, and the patient taken to bed. The pain incidental to the operation remained for several hours, diminished considerably during the night, and disappeared by the following morning. Everything then was doing well, and nothing untoward occurring, he was discharged three

[1] Recueil de Ophthalmogie, April, 1877.

days after. On the 27th of July and 6th of August, he reported in good condition, and with perfect binocular vision.

CASE III.—E. G. C., a native of Havana, 17 years old, and by occupation a mechanic, came to the clinic the first time on the 18th of July, 1877, on account of a speck of iron which got into his eye while at work only a few hours before, disabling him from further labor. On examination a foreign body resembling the point of a pin was discovered in the centre of the cornea and removed in the usual way. On the 27th of June, 1881, he once more made his appearance, complaining of something which had again lodged in one of his eyes. Placed in a good light a glistening foreign body could be seen lying on the iris, and which at times seemed located in the cornea. On this membrane no evidence of the passage of the foreign body could be detected at first, but a more searching inspection by oblique artificial light revealed a very minute opacity in the internal inferior segment, and almost at the level of the transverse diameter. This was the point of entrance, although the fragment lay in the internal and superior segment of the iris, the divergence being due to its flight from below upwards, in which direction it entered the eye. No change had taken place in the organ; the aqueous humor was still clear; the pupil reacted normally; and the only subjective symptom present was slight discomfort in the eye. The diagnosis established, the gravity of the prognosis was obvious, unless the foreign body could be skilfully extracted, and its removal was indicated before the occurrence of inflammatory action rendered it more difficult or impossible. On the afternoon of the same day the patient was anæsthetized with chloroform and the operation undertaken, the pupil being well contracted by the previous instillation of a few drops of bromohydrate of eserine. With a triangular knife a linear section half a centimetre long was made in the internal and superior segment of the cornea. The slow withdrawal of the knife was followed by the escape of the aqueous humor without prolapse of the iris, and the disappearance of the anterior chamber. Mathieu's iridectomy forceps were now introduced, and the foreign body seized, but so insecurely that it slipped off; a second attempt, however, was more successful, and it was safely extracted. After the operation atropia was dropped in the eye, and the patient vomited. No pain was complained of when the effect of the chloroform had entirely disappeared; the ocular conjunctiva was slightly injected; the pupil had dilated transversely, assuming an elliptic form; and on that portion of the iris where the fragment rested there was a slight reddish spot, probably an insignificant hypæmia. The patient seemed perfectly well on the following day, and was discharged at his own request.

The foregoing cases demonstrate in my estimation the course to be pursued when foreign bodies lodge in the anterior chamber of the eye, as well as the difficulties attending their removal, and the disorders that the delay in effecting this may provoke. Thus, in Case I., we see how the low position of the fragments was a serious obstacle to the operation, as the corneal section had to be performed in the very segment occupied by them, and there was danger of dragging the foreign bodies with the knife. The external or internal hyperæmia occurring in two of the cases cannot always be prevented, and so darkens the field of operation and conceals the foreign body as to necessitate the unavoidable mutilation of the iris by iridectomy. In the second case the operation was delayed, and incipient inflammatory action already gave warning of a possible iritis, exudation, concealment of the foreign body, and a difficult operation. The extraction of the foreign body, however, is always indicated; it is the *cause* of the trouble, and no principle is better established in medicine as that of the *removal of the causes* of disease. In a case of extraction of a foreign body with iridectomy, which I witnessed in Paris, the eye was so shrunken as to convey the impression of incipient atrophy of the bulb, and yet, after the operation, the organ regained its normal fulness, and I doubt not sight was restored. When, on the other hand, the condition of things is such as obtained in Case III., and the foreign body lies within easy reach of the forceps, and no hyperæmia supervenes, the operation presents no difficulties, and is crowned by complete success.

HAVANA, July, 1882.

AN AUTOMATIC CURRENT INTERRUPTER.

BY ROBERT MEADE SMITH, M. D.,
DEMONSTRATOR OF PHYSIOLOGY, UNIVERSITY OF PENNSYLVANIA.

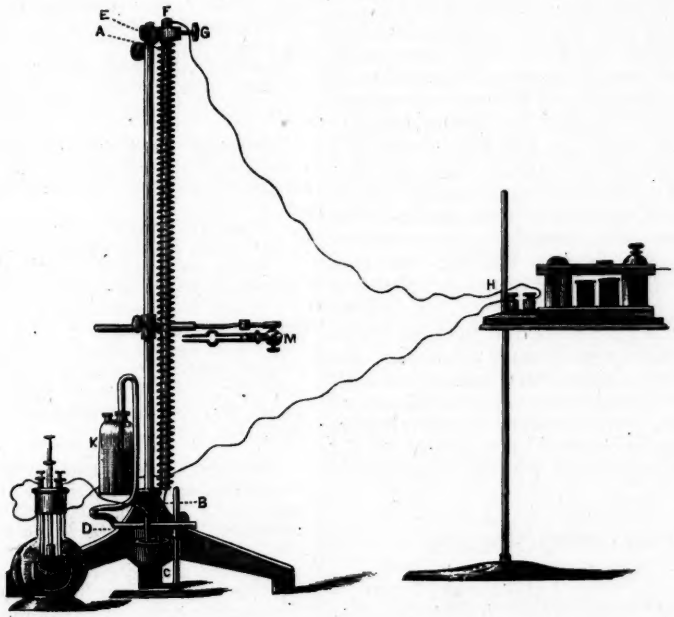
IT is well known that, according to the laws of Ampère, parallel electric currents passing through conductors in the same direction, attract each other, and an instrument based on this fact, known to teachers of physics as Roget's spiral, suggested to me that the same principle might be made use of for the automatic interruption of a current for various physiological or medical purposes.

The arrangement I have made use of is represented in Fig. 1. A spiral of insulated copper wire (made by wrapping the wire around a wooden cylinder) is suspended vertically from the cross arm A, so that the free end, B, dips into the mercury in the U-tube, C, in the other arm of which dips a second wire, D, connected with the + pole of a single Grenet cell. In the figure, the end, B, of the spiral should have been vertical, and the U-tube should have been more elevated. The fixed end of the spiral is connected at the binding-screw E with a second insulated copper wire wrapped in the same direction around the core of soft iron F, starting from its fixed end to its free extremity, and then returning, after having again wrapped around the core, to the binding-post G. The post G and the — pole of the battery are then connected with wires to the electro-magnet at H, or to any apparatus through which it is desired to send the interrupted current.

When now the zinc is pushed down into the battery fluid, the current passes through the mercury into the free end of the spiral, through the spiral into the binding-post E; then down the inner coil around the bar of soft iron and back to the screw G, then to the electro-magnet and back to the battery. As

soon, however, as the current commences to pass through the spiral, each coil is attracted by the one next above it, in accordance with the law of Ampère above alluded to, and the spiral shortens enough to draw its free end out of the mercury, thus interrupting the circuit; the coil then lengthens from its own weight, dips again into the mercury, shortens, breaks the circuit, falls again, and so on indefinitely. At K is a flask, containing alcohol, which is connected by a siphon to the U-tube; by flowing over the mercury the alcohol serves to keep its surface clean.

FIG. 1.



The value of the inner helix and core is greatly to intensify the attractive influence between the coils of the outer spiral; in the first place, the currents in the inner and outer spirals being parallel and in the same direction, attract one another; and in the second place, the current passing around the core renders it magnetic by resolving the Ampèrian currents into a current flowing in the same direction as that in the inducing helix, and intensifies its action, thus producing an action analagous to that resulting when the north pole of a magnet is brought within the coil of the north pole of a solenoid. For if a bar of soft iron, or the north pole of a bar magnet is brought partly within the coils of a solenoid (at its north pole, in the case of the magnet), the bar will be drawn still further within the coils of the solenoid until the magnetic forces are in equilibrium. But if the bar is fixed and the helix is free to move, as in the case of the apparatus described, the coils will be compressed and tend to cover the bar by an analogous action.

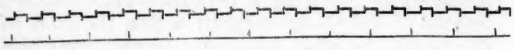
A similar intensifying effect on the outer spiral, though weaker than in the above instance, may be produced by inserting a permanent bar magnet, instead of the electro-magnet, within the coils of the spiral, the effect being due to the attractions between the Ampèrian current of the magnet and the helix, though it must be remembered that the *north pole* of the magnet must be downwards if the helix is dextrorsal, or the reverse, if it is a sinistrorsal helix.

By means of this apparatus interruptions of an electric current can be obtained at perfectly regular intervals, the rate depending on the length and coefficient of elasticity of the spring. If we have a spiral spring of uniform elasticity, one end fixed and one end free to vibrate, its rate of vibration will be governed by the same laws as those regulating the longitudinal vibration of rods fixed at one end, *i. e.*, the rate of vibration will be inversely proportional to the length of the spring, or half the spring will vibrate twice as fast as the whole spring, one-third three times as fast, and so on. Practically, however, we find that the elasticity will vary in different parts of the spiral from lack of uniformity in the wire, and from the fact that each coil, as we ascend the spiral, is supporting the gradually increasing weight of the coils below, and therefore the tension will vary in different parts of the coil.

It is a very simple matter, however, to determine once for all the rates of vibration of any given spring by ascertaining the number of interruptions for each coil by comparison with some given standard, when a scale can be made for future use.

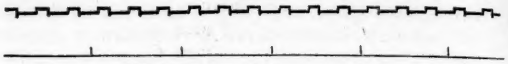
Thus in the spring which I have most used, the entire length of spiral (consisting of 93 coils) vi-

FIG. 2.



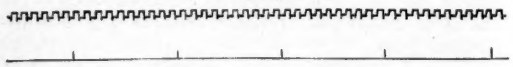
One and a half interruptions per second.

FIG. 3.



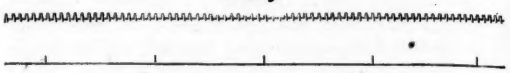
Three interruptions per second.

FIG. 4.



Ten interruptions per second.

FIG. 5.



Sixteen interruptions per second.

brates at the rate of 1½ per second; half the coil, or 46½ turns, should then vibrate three times a second. Practically we find that 43 coils vibrating, give this rate, and so on, with a slight discrepancy between the theoretical and practical numbers from the causes above alluded to. The coil is shortened to the desired length by means of the sliding clamp M.

A few examples (Figs. 2, 3, 4, and 5, acurately reproduced from tracings) are given to show the regularity of the rate of vibration; the lower line, which serves as a standard, was made by an electro-magnetic marker connected with Ludwig's current breaker (Unterbrechungsuhr) beating seconds. Tracings were made for each individual coil of the spiral and each tracing continued for thirty seconds, so as to avoid any errors in the omission of fractions where only a few seconds were counted; this also was done in the examples given, the reduction in length of the published tracings made being for the sake of economy of space. With this spiral, perfectly regular interruptions may be obtained varying from 1½ per second up to 16 per second, with the intermediate fractions.

MEDICAL PROGRESS.

CYST OF THE PANCREAS; LAPAROTOMY; DEATH.—BUKOWSKI relates in the *Centralb. f. Chirurgie*, No. 26, 1882, the case of a woman, aged 36, who was admitted into the Maria Theresa Hospital at Vienna with a fluctuating tumor, situated below the navel, and which could be readily depressed by the hand into the cavity of the pelvis. The tumor had then been present for two years and nine months, and was gradually increasing in size. It was diagnosed as an ovarian cyst, and on Feb. 27, M. Rokitansky undertook its extirpation. An incision twenty-four centimetres long was made in the linea alba, and a quantity of ascitic fluid allowed to escape. The tumor then protruded, and was found to be adherent on its anterior surface to the greater omentum, the posterior wall of the stomach, and the ascending and descending colon: the latter was torn in the attempt to free it from its adhesions, and the rent closed with five sutures. No less than fifty ligatures were necessary to control the hemorrhage. At the moment of attaching the mesentery, the cyst ruptured, and part of its contents escaped into the abdominal cavity; nevertheless, five litres of a brownish liquid were drawn from the cyst.

After two hours of fruitless attempts, it was necessary, on account of impending death, to abandon the idea of extirpating the cyst, the portions still adherent being divided with an ecraseur. The peritoneal cavity was washed out through a drainage-tube by two per cent. solution of carbolic acid. On the sixth day after the operation, feces escaped through the drainage-tube; on the next day the woman died.

At the autopsy, purulent peritonitis was found; the base of the cyst was connected with the tail and body of the pancreas, its interior being in connection with the pancreatic duct.

The fluid contained coloring matter, blood, serum albumen, serum globulin, paralbumen, cholesterin, and inorganic salts.—*Gaz. Méd. de Paris*, August 26, 1882.

INJECTIONS OF IODINE IN OVARIAN CYSTS.—M. BOINÉT read a paper on this subject before a recent meeting of the Societé de Chirurgie. His conclusions are:

1. That injections of iodine are especially efficacious in unilocular, limpid, serous cysts.
2. When the contained fluid is thick, tenacious, and albuminous, it is better to have recourse to ovariotomy.
3. Injections of iodine are also suitable to purulent cysts and hæmatoma.
4. When the cyst contains a fluid as clear as water, a simple puncture is usually all that is necessary for a cure; should the secretion again form, injections of iodine may be employed.—*Rev. de Thérapeutique*, September 1, 1881.

TEST FOR ATROPIA AND DATURIA.—If a specimen of either atropia or daturia, or of their salts, be covered with a little fuming nitric acid, evaporated to dryness on the water-bath, and when cold moistened with a drop of a solution of caustic potassium in absolute alcohol, a violet color is at once produced, which soon passes into a fine red. The violet color only is characteristic, since strychnia, when similarly treated, gives the red. According to *Zeit. f. Anal. Chem.*, one-millionth of a gramme of atropia sulphate can be thus detected. None of the other alkaloids act similarly.—*Chicago Med. Rev.*, September 15, 1882.

SEMPER'S METHOD OF MAKING ANATOMICAL PREPARATIONS.—DR. SEMPER, Professor of Zoölogy at the University of Würzburg, has discovered a method of making anatomical preparations which assures the preservation of the several organs. He has used the method constantly for several years, and the results are said to be excellent. After the dissection is made, it is macerated from one to five days according to its proportions in weak chromic acid (1 to 2 per 100); it is then washed, and treated with weak alcohol (30 per 100), adding alcohol of gradually increased strength. The preparation is then placed in strong alcohol from one to seven or eight days, afterwards in absolute alcohol, and finally it is left to macerate in turpentine until it is thoroughly soaked. The preparation is then spread out and allowed to dry by contact with the air, it thus becomes perfectly white; the different organs can be colored by using the best oil colors. When the preparations have been thoroughly dried after their maceration in turpentine, they reassume to a great extent their natural coloring, if they be immersed in a mixture composed of equal parts of a saturated solution of white sugar and glycerine.—*British Medical Journal*, September 9, 1882.

THE IODOFORM TREATMENT OF WOUNDS.—In the Augusta Hospital at Berlin, for some time past, a 10 per cent. solution of iodoform in collodium has been used for the purpose of closing antiseptically small recent wounds, which neither required nor admitted of the application of a compress-dressing. The wound is first cleaned and disinfected, any bleeding stopped, and the necessary sutures applied, and then the surface is painted with the iodoform solution till a strong and perfectly protective covering is formed. This treatment is employed in the case of wounds healing by first intention, as well as in recently sutured large wounds to which, either on account of their position or as the result of operation, a compressing antiseptic bandage cannot be applied, *e. g.*, after excision of the submaxilla, or of small tumors, atheromatous cysts, or lipomata in the region of the anus, female genitals, or eye. The stitches remain in for eight or ten days, at the end of which period primary union is found to be complete. Dr. Theodor Görges (*Centralb. f. Chirurg.*) also had good success with this solution in the treatment of tracheotomy wounds during diphtheria. Instead of using the pad of carbolized oil lint which was formerly placed over such wounds, he now paints the raw surfaces (after hemorrhage has been arrested) with the iodoform-collodium. The application is repeated daily after the old crust has been first removed. The wound thus treated is merely covered with a small dry pad to keep off the pressure of the canula. This treatment has been employed in 25 cases altogether (22 diphtheritic) without the wound in any one case becoming phlegmonous, whilst under the old employment one out of every five cases would become so involved. In conclusion, he adds a few remarks on iodoform treatment in general. Since Professor Küster commenced the general employment of iodoform in the Augusta Hospital three months ago, the results obtained have been very different from the success so copiously announced from all sides. Not only have toxæmic symptoms been observed even after its employment in minute doses; not only have several cases of cerebral complication with typhous symptoms occurred; but erysipelas and phlegmonous inflammation have appeared in rapid sequence—accidents which, under Lister's treatment, have been there of the greatest rarity. Thus, among certain mammary amputations, where iodoform was applied under a typical Lister's dressing, three cases of erysipelas occurred, and one of these ended fatally. Suppuration also followed its use in cases of herniotomy and amputation of the upper arm, etc. Thus iodoform seems to afford but a slight protection against erysipelas, and even when applied in the finest powder to sutured wounds, which should heal by first intention, it seems to act as a foreign body and to lead to retention of secretion or aseptic suppuration. At all events, these accidents have induced them to return to the Listerian treatment, under which, during the past year, were obtained such speedy and satisfactory results. Perhaps these remarks may call forth a clearer definition of the cases in which iodoform should be chosen, and of those in which the earlier forms of treatment should be relied on.—*Edinburgh Medical Journal*, September, 1882.

CHLOROFORM-WATER.—In an article in the *Gazette des Hôpitaux*, of March 25, attention is drawn to this highly useful preparation of chloroform for internal use. Profs. Lasègue and Regnauld have shown that the solubility of chloroform in water does not exceed 9 per 1000. The solution is obtained by pouring an excess of chloroform in a bottle three parts full of distilled water, shaking the mixture repeatedly, and then allowing the insoluble chloroform to deposit until complete transparency is obtained. The separation of the saturated solution is then made by decantation, or by means of a siphon. This solution, being too strong for internal use, requires dilution. (The *Aqua chloroformi* of the British Pharmacopœia has a nominal strength of 1 in 200.) Various salts (as chlorate of potash, borate, bicarbonate, and salicylate of sodium) may be dissolved in this water without undergoing any modification; and Profs. Lasègue and Regnauld are of the opinion that chloroform-water, either pure or diluted, will meet every need in the internal administration of this substance. Having a pleasant taste in the mouth which lasts for a minute or two, it is well calculated to disguise the unpleasant taste of various medicines, as castor-oil, etc. By the direct action which it exerts on the mucous membranes, it may prove useful in certain affections of the mouth, gums, teeth, velum, and pharynx. It exerts a stimulant action on the stomach, but it acts differently according as it is taken before, during, or after a meal, and according to the lapse of time that has intervened between taking the meal and the absorption of the chloroform. Given before a repast, in aid of the appetite, the chloroform-water is a bad agent; but given after a meal, whether alone or combined with an alcoholic wine and sweetened, it increases the stimulant properties of the wine or produces like effects. When administered to allay the manifold troubles which supervene during the course of digestion and produce its disturbance it has much value. Its maximum therapeutic action is obtained three or four hours after the meal, when functional disturbances show themselves by yawning, distention, gaseous eructations, a sense of epigastric pressure or heaviness, flushings of the face, and threatenings of vertigo. But when the digestive disturbances are manifested by acute lancinating pains of the stomach, oppression, palpitations of the heart, fleeting febrile action, dryness of the mouth, painful tympanites, etc., the action of the chloroform-water is injurious; this stage contra-indicates all forms of stimulants. In a word, the chloroform-water acts on the stomach in the same calming way as upon the interior of the mouth, and if it does not cure the affection, at least it mitigates its consequences. It is a remedy for the crisis, but does not render needless the proper treatment-in-chief. It is eminently suitable in painful digestion arising from dilatation of the stomach.—*Practitioner*, September, 1882.

RARE FORM OF SENILE GANGRENE.—MR. JOSEPH BELL reports the following case: W. H., æt. 75, a very healthy, temperate, contented old man, of spare habit and fairly healthy arteries, was sent into the hospital on January 17, 1882. The second toe of his right foot was black and evidently dead. He said that a few days before admission he had met with an accident, the iron plate of a retort having fallen on his foot. The whole foot was red and swollen; not much pain, and no constitutional disturbance. On January 24th, the dead toe was nipped off with scissors, no blood being lost; the tendons alone required division. The bones were noticed to be curiously macerated, as if they had lain long in water. In another fortnight the third toe, which had been alive and healthy, except for a slight redness, also died and was lifted off, the bones being macerated, and this time the tendons also destroyed. The resulting gap left by the removal of these two toes was large but painless, and suppurated freely with little odor. Up to March 10th, all went well, and the wound was nearly healed. The extremities of the second and third metatarsals had separated from their shafts at the epiphysial junction, and were lifted out with ease.

On March 10th, however, without either pain or elevation of temperature, a dark blush was noticed all

over the great toe, which had hitherto looked healthy, and half way up its metatarsal bone. The circulation in this area was exceedingly sluggish, the finger leaving a white dimple on pressure, which took several seconds to refill with blood. After two or three days of doubt a bulla was noticed to form just on the dorsum of the metatarso-phalangeal joint. This bulla rapidly raised the cuticle to the size of a florin, and, being cautiously cut into, showed the true skin, not as usual in such cases, either shrivelled up or sloughing, but as if it had melted into a shreddy pultaceous mass, and this involved not only skin, but cellular tissue, ligaments, and periosteum, for by March 20th, without any displacement of parts, suppuration, or odor, the proximal phalanx and metatarsal head were both exposed as if thoroughly macerated, and lay loose in this pultaceous mass. The edges of the ulcer or cavity were everted and undermined as if by a gumma, were of a pinky redness. but exhibited no granulations or any attempt at repair. Having watched many cases of senile gangrene from embolism also for months under careful observation, he was quite familiar with the usual processes of separation, whether moist or dry; but he had never seen or read of any case in the least resembling this one, whether in its rapidity of maceration of tissue, its curious cessations or intermissions, its freedom from pain, and apparently trifling effect on the constitution.

The treatment was purely expectant, no intereference that could be avoided, absolute rest in bed, milk, diet, which was well borne, and locally keeping the limb at an equable temperature by cotton wadding (carbolized) and marine lint to sop up discharges.

The result has been remarkable. To-day, June 30th, the apparently dead and macerating heads of metatarsal and first phalanx have recovered themselves, granulations have formed, and now the wound has closed, with the exception of a line of granulations about a quarter of an inch long and one-sixth of an inch broad, under which can be felt a thin scale of carious bone. The old man is quite well, and goes home this week.—*Edinburgh Med. Journ.*, August, 1882.

INTESTINAL OCCLUSION BY AN ABSCESS OF THE PANCREAS; LAPAROTOMY; DEATH.—At the last Congress of German Surgeons, ROSENBACH related the case of a woman, aged 57 years, who, for eight weeks before her entrance into the hospital, had been suffering from obstinate constipation. When she came under Rosenbach's care, she had not had a movement of the bowels for three days, and was suffering from stercoraceous vomiting. The left half of the abdomen was greatly distended with gas, and a fluctuating tumor, the size of a child's head, could be felt below and behind the stomach. As the constipation could not be overcome, laparotomy was performed, the abdomen being opened by an incision in the linea alba over the tumor. The tumor was surrounded by an inflammatory zone, and could not be isolated; it was accidentally ruptured, and a fetid liquid escaped. The edges of the sac were united with the edges of the abdominal wound, and drainage carried on through tubes. The patient died of collapse in six hours. The autopsy showed that the case was one of abscess of the pancreas, extending to the stomach and lesser omentum, and originating in a point of necrosis of the pancreas. It had contracted adhesions with the large intestine, and had obliterated its canal by compression.—*Gaz. Méd. de Paris*, August 26, 1882.

THE INFLUENCE OF NERVE-SECTION ON THE FORMATION OF CALLUS IN FRACTURES.—From an elaborate experimental investigation, DR. W. KUSMIN draws the following conclusions:

1. After section of nerves in cases of fracture, the formation of callus is much greater and firmer than where no such operation has been performed.

2. The lime impregnation of the callus, after nerve-section, proceeds more rapidly, and terminates in genuine bone formation.

3. The formation of bone in the callus first occurs by metaplasis.

4. In the later stages the bone is formed in a manner analagous to endochrondal ossification; that is, neoplasis is associated with metaplasis.

5. The first signs of ossification in adjusted fractures commence under the periosteum and at the outer periphery of the old bone. In preparations in which the nerves have been divided, the process progresses much more rapidly in both localities.—*All. Wiener Med. Zeit.*, August 29, 1882.

AN ABNORMALLY LONG STYLOID PROCESS AS THE CAUSE OF DYSPHAGIA.—DR. WIENLECHER relates two cases of the above trouble. In the first, a lady patient experienced since twelve days a severe pain, accompanied by a sensation of pressure in the right tonsil. On examination, a hard body was found, the blunt end of which pressed forward against the mucous membrane. It could be traced outwards, could not be felt above, but corresponded in all to the site, etc., of the styloid process. Dr. Wienlecher pressed it forcibly outward and it disappeared with a crash, plainly heard by all around. The dysphagia disappeared. After ten months the patient returned with the same trouble which had appeared since three days. Pathology and treatment were the same, neither after the operation nor on the next day could a hard body be felt. In another case observed by the author it was impossible to fracture the bone. The author draws attention to the fact that this anomaly may impede incision of the tonsil from below upward.—*Chicago Med. Rev.*, September 15, 1882.

IODOFORM IN TERTIARY SYPHILIS.—DR. THOMANN, of Gratz, concludes a communication on this subject, as follows:

1. Iodoform exerts a favorable influence on the process of healing of tertiary syphilitic lesions.

2. Very large doses can be borne, and hasten a cure.

3. Iodine can be found in the urine for as long as 43 days after the cessation of the administration of iodoform; the organism, therefore, is for a long time subjected to the action of the drug.

4. No unpleasant effects are produced, the acne and coryza which often follow prolonged administration of iodide of potassium can be therefore avoided.—*Centralb. f. d. Med. Wissen.*, September 2, 1882.

TREATMENT OF VAGINITIS.—For the last two years M. GOUGUENHEIM (*Journ. de Méd. de Paris*) has treated acute blennorrhagic vaginitis at the Lourcine by a method which has given him most favorable results, and which is exceedingly simple. It consists in placing in the vagina, with the aid of a small speculum, bags of variable size made of coarse muslin, and nearly filled with a powder composed of a mixture of nine parts of alum and one part of tannic acid. The bag is left *in situ* from twelve to eighteen hours, and is then withdrawn, while the patient is in a bath, by means of a cord attached to it, as to an ordinary plug. After the withdrawal of the bag, the vagina is syringed out with warm water to facilitate the removal of the membrane that has formed. After a few repetitions of this mode of treatment, twice a week, the discharge ceases. Dr. Gouguenheim says he has borrowed the idea of these bags from the practice of Madame Lachapelle.—*Dublin Journ. of Med. Science*, July, 1882.

NYSTAGMUS AND HEMERALOPIA OF MINERS.—At the meeting of the French Association for the Advancement of the Sciences, on August 24, 1882, M. DRANSART read a paper on this subject, based on ninety-three observations. The following are his conclusions:

1. The nystagmus of miners depends upon a paresis of the elevator apparatus of the eyes, both muscles and nerves, produced by excessive fatigue. This paresis is independent of any central lesion and any abnormal refraction. General atony, anæmia, and bad light are secondarily important factors, but are not essential to the production of the nystagmus.

2. A condition of hemeralopia, intimately associated with the nystagmus, also exists in miners; it can, however, occur independently of the latter affection.

3. The nystagmus is a curable disease; it should not be considered as exempting from military service.—*Gaz. Méd. de Paris*, September 2, 1882.

DIET IN CHRONIC NEPHRITIS.—PROF. LICHTHEIM (*Corres. f. Schweiz. Aerzte*, No. 7, 1882), in an address to the Medico-Chirurgical Society of Berne, treats this subject with much fulness. The ordinary practice, he says, is to prescribe a diet more than usually rich in albumen with a view of replacing the loss from the kidneys. The patient's danger from loss of albumen is, however, much less than that arising from the imperfect filtration performed by the kidneys, and the consequent retention of nitrogenous waste-products in the blood. For a considerable time this tendency to retention may be counteracted by the increased blood-pressure and cardiac hypertrophy, which effect a sufficient elimination even from the defective kidneys. This being the case, it must needs be unwise to strain this attempted compensation unduly by giving nitrogenous foods in quantity; this merely implies increased production of nitrogenous waste and increased work on the eliminating organs. The result of such a regimen must be a further increase of the blood-pressure and greater cardiac hypertrophy, until at last the heart ceases to respond and becomes dilated; in other words, a new difficulty to the embarrassed circulation is raised. By giving food which contained little nitrogen the author has found that the dyspnœa of confirmed nephritics rapidly disappeared. He is inclined to regard this dyspnœa not as uræmic, but as a simple consequence of insufficient contraction of the heart, analogous, therefore, to the dyspnœa of cardiac patients.—*Practitioner*, September, 1882.

THE NORMAL VENOUS PULSE AND THE VENOUS PULSE IN PERICARDIAL EFFUSIONS.—From an experimental study of this subject, DR. FRANTZ RIEGEL draws the following conclusions:

1. The normal jugular venous pulse of animals is anadicrotic, katamonocrotic. The anadicrotic wave corresponds with the diastole of the ventricle and the auricular systole, and the katacrotic limb with the ventricular systole. In these peculiarities it resembles the normal human venous pulse.

2. In high degrees of increased intra-pericardial pressure, as in pericardial exudation, the venous pulse is diastolic-presystolic, and never coincides with the systole of the ventricle.

3. Increase of intra-pericardial pressure depresses the arterial and elevates the venous blood pressure. On the other hand, in excessive intra-pericardial pressure the initial increase of venous blood pressure gradually disappears.

4. The normal collapse of the veins at each systole of the heart is caused by the synchronous diastole of the auricle; the increase of negative pressure in the pericardium at each ventricular systole, by decrease of volume, may also assist in the production of this phenomenon.—*Deutsches Arch. f. klin. Med.*, Bd. xxxi., 5 u. 6.

RESECTION OF CARCINOMATOUS LARGE INTESTINE.—RICHTER (*Centralb. für Chirurgie*) reports the case of a patient, aged 33, who had been frequently under treatment for stenosis of the intestines (said to be the result of dysentery) situated in the region of the sigmoid flexure, where a firm cord-like swelling could be felt through the abdominal walls. At length the patient's symptoms became so urgent that immediate operation was resolved on. The abdomen was opened in the linea alba, the distended small intestines, wrapped in disinfected cloths, were drawn to one side, and the stricture, seated a little above the sigmoid flexure, was exposed. The affected intestine, drawn well forwards, was divided by a transverse incision immediately above the point of stricture, and a large quantity of very offensive, tenacious, fluid fecal matter was evacuated; but in spite of this the distention of the small intestines was scarcely diminished. The gut was then punctured in several places with a trocar, the gas and feces expressed, and the punctures closed with catgut sutures. The portion of intestine which had been drawn forward was then disinfected and replaced *in situ* above the stricture. The lower end of the colon was kept closed during the operation by the fingers of an assistant. Three inches of the strictured portion of the gut were then excised, and the upper tube was joined to the lower by means of Czerny's suture. The short mesentery was treated in a similar manner. The point of union was then fixed opposite the inferior extremity of the wound in the parietes, which was left unsutured in its inferior fourth. Finally a Lister dressing was applied. Duration of the operation, three hours. On examination the stricture was found to be cancerous. A small stool was passed only a few hours after the operation; but on the eighth day, feces and flatus escaping through the wound, the Lister's dressing was abandoned and open treatment adopted. Gradually the stools began to pass *per vias naturales*, and by April 19th, or fifty-four days after the operation, the patient was able to spend the greater part of the day out of bed, although for a month more there was an evening rise of temperature. The fistula at last healed under applications of the thermo-cautery and argenti nitras. On October 19th the patient was dismissed strong and well.

Köhler considers that resection is preferable to colotomy in all cases where the disease has not extensively involved neighboring structures, or where the patient's strength is not so reduced that this severe operation cannot be safely performed. Von Erekelen's researches show that life was prolonged in 62 per cent. of the published cases of colotomy; but, of course, the focus of disease was not thereby removed, and there was no thought of a radical cure. Such a cure is, however, much more likely after extirpation, for the growth rarely infects the lymphatic glands, and is but little prone to metastatic formation or recurrence. Besides, this method renders the objectionable artificial anus unnecessary. Up to the present time 18 out of 25 cases of completed resection of the large intestine have taken a favorable course. In three of these the disease has recurred with a fatal result; but the remaining 15, *i. e.*, 60 per cent. of all those operated upon, seem to be perfectly cured.

As regards operative details, Köhler recommends that the abdominal incision be made in the linea alba, arrest of hemorrhage being thus facilitated and a good view of the parts obtained. During the operation the divided end of the intestine is to be kept closed by the hand of an assistant, whilst, if possible, the piece to be resected and the adjacent healthy part are drawn beyond the abdominal wall, so that an escape of intestinal con-

tents may not take place into the peritoneal cavity. Finally, he recommends that, as in the case above described, the sutured intestine should be fixed opposite the lower end of the wound in the abdomen (Köhler, *Inaug. Dis., Breslau*).—*Edinburgh Med. Journ.*, Aug. 1882.

HYSTERO-EPILEPSY IN A BOY.—M. BOURNEVILLE has put on record, in the *Progrès Médical*, for August 26, a second case of hystero-epilepsy in a boy. The child was thirteen years of age when he came under observation. The following points in his history seem worthy of note: His parents were first cousins. His father was subject to migraine in early life; his mother had spasmodic wry-neck in infancy, one of her sisters was idiotic (?). The patient was the eldest child; he seems to have been always an excitable child and easily frightened, subject to night-terrors. His hysterical attacks commenced in the month of February, 1880, about a month before he came under observation. The first one came on, whilst he was at work at school, with vertigo, and, after lasting two hours, was terminated by singing, crying, and laughter. The senses of hearing, sight, taste, and smell were decidedly less acute on the left than on the right side, and the same may be said of the common sensibility of his buccal mucous membrane and conjunctiva. His intellectual faculties seemed unimpaired, and he was said to be gentle and affectionate. There was no history of masturbation. On examination, several different areas were found, over which pressure was painful (*zones hystérogênes*). They were situated as follows: 1. "*Clou hystérique*," at a small spot, two centimetres in front of the vertex. 2. "*Rachialgie*," over the spinous processes of the fifth, sixth, and seventh dorsal vertebræ. 3. Symmetrical spots on each side in the fifth intercostal space midway between the nipple and the axillary line. 4. A painful spot in the seventh left intercostal space, about five centimetres from the spot. 5. A spot over the manubrium sterni. 6. Symmetrical spots over the loins. 7. A spot almost over the centre of the iliac fossæ, corresponding to the "ovarian" region; that on the left side is the most marked. The attacks recurred at regular intervals, and lasted from one to two hours. They were preceded by an aura, which consisted of a sensation of a ball rising from the penis to the epigastrum, and thence to the level of the larynx. This was followed by the "*clou hystérique*," and then he lost consciousness. The attacks were characterized by a preliminary stage of rigidity of unusually short duration, succeeded by a clonic period, which was, on the other hand, of unusual length, comprising varied contortions and passional attitudes. During this period he would try, by different methods, to injure himself or those around him. The attack concluded, he sometimes had hallucinations of sight. He also presented a hemianæsthesia, at one time on the left side, at another on the right. The patient was cured (apparently in a permanent manner) by the assiduous use of cold douche-baths. The case may be noted as a typical one both of "hystero-epilepsy," and of the way in which the physician's office is magnified in such disorders by our French *confrères*.—*Med. Times and Gaz.*, Sept. 2, 1882.

DYSTOCIA BY TRANSVERSE OCCLUSION OF THE UTERUS.—The following rare case is reported in *Le Praticien*. The woman, thirty-nine years of age, had borne a child eighteen years ago. When pregnant again after this time she had very severe labor pains, but without any effect. The examination showed a membrane separating the cavity of the uterus from the cervix, which latter was voluminous, and as large as a silver dollar. The posterior cul-de-sac of the vagina was pressed downward, which indicated a sac-like dilatation of the posterior segment of the uterus. The membrane was cut with scissors, but the cavity of the uterus could not be entered. The woman died three hours afterward. The autopsy showed a placenta prævia, the child already putrefied. The cavity of the uterus was separated from the cervix by a membrane, in a transverse direction, and three centimetres long.—*Chicago Medical Journal and Examiner*, August, 1882.

OIL OF EUCALYPTUS IN MIDWIFERY PRACTICE.—DR. SAMUEL SLOAN, Obstetric Physician to the Glasgow Maternity, recommends the use of the oil of eucalyptus in midwifery practice. He has found it to possess, as an antiseptic, the following advantages: 1. It is non-poisonous. 2. In the quantity and strength required it is unirritating. 3. It does not coagulate the lochia, which, by separating the lips of the vulva, can be seen to flow out in a liquid stream. 4. Its odor is, with rare exceptions, a pleasant one. 5. It seems to act as a uterine stimulant, causing and assisting to maintain uterine contraction. Formed into a pessary of a suitable shape and size it is easily applied to the neighborhood of the os, and retained there. To secure this, the pessary must be broad and short, must melt slowly but completely, and must contain a large percentage of the antiseptic oil. These requisites he has found the following formula to supply: Oil of eucalyptus, six drachms; white wax, four drachms; cocoa butter, four drachms; mix and divide into twelve pessaries. One of these must be applied night and morning immediately after the usual sponging, and, though the napkins are frequently changed, the odor will be quite perceptible on the one removed prior to the next sponging, twelve hours later. In cases of miscarriage, or when the lochia has diminished materially in quantity—say, six days after confinement—he has found the above strength produce irritation, and the following will then be found preferable: Oil of eucalyptus, four drachms; white wax, one hundred and sixty grains; cocoa butter, four drachms; divide this mixture into twelve pessaries, and label them No. 2. These may also be used at first night and morning, and afterwards at night only. These pessaries are made by first melting together the wax and cocoa butter in a vessel resting in hot water; the oil of eucalyptus is then mixed with this, and the fluid poured into the ordinary two-drachm pessary mould, each cavity being somewhat more than half filled. He has never been able to satisfy himself that the eucalyptus was absorbed into the system to any material extent. This is probable, however, and, in one case, seemed to be proved. This was a case of severely ruptured perineum, which was stitched and united throughout. The pessaries had been continued for sixteen days, when an erythematous rash appeared over the whole body, disappearing immediately on the cessation of the eucalyptic treatment. Though uncertain as to the fact of a material absorption of the oil into the system, he is persuaded that the oil does not remain at the os, but freely passes into the cavity of the uterus. For it is admitted that the uterus for several days after labor is naturally in an alternate state of contraction and relaxation, and whilst during contraction it will empty itself, during relaxation again whatever is lying at the os or upper part of the vagina will be sucked into the vacuum produced. The eucalyptus will therefore find its way quite into the uterine cavity. When he said that, with rare exceptions, the odor is agreeable, he referred to a decomposition of the eucalyptus oil which sometimes takes place, giving the napkin a semi-fetid odor. That this does not arise from a change in the lochia he has proved by simply omitting the next pessary when due; he then found that the lochia was absolutely sweet.—*Lancet*, September 2, 1882.

THE MEDICAL NEWS.

A WEEKLY JOURNAL

OF MEDICAL SCIENCE.

COMMUNICATIONS are invited from all parts of the world. Original articles contributed exclusively to THE MEDICAL NEWS will be liberally paid for upon publication. When necessary to elucidate the text, illustrations will be furnished without cost to the author. Editor's Address, No. 1004 Walnut St., Philadelphia.

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PHILADELPHIA, PA.

SATURDAY, SEPTEMBER 30, 1882.

THE MEDICAL DIPLOMA SCANDAL.

THE original medical colleges, which have been organized to supply a real want, alone have a right to existence. After the needs of the country have been satisfied, colleges go on organizing, not in obedience to any legitimate requirement, but merely to satisfy the ambition of professorial aspirants. Thus, for example, taking a certain area of country, which has Louisville for its geographical centre, we have in Cincinnati three regular medical schools, in Columbus two, in Cleveland two or three, in Toledo one preparing for business, in Fort Wayne two, in Indianapolis two, in St. Louis four, in Chicago four, in Louisville four, in Evansville one or two, in Nashville two or three, in Memphis one or two, and in Pittsburg the preparations are making for one. It cannot be pretended that such an array of medical schools is justified in any need of the medical profession. One each in Cincinnati, Louisville, Chicago, and St. Louis, would amply supply every demand. In the smaller cities, the lack of a suitable clinical field, and of other facilities for teaching medicine and surgery, should operate to correct the ambition of medical college makers.

There is, however, usually in these smaller cities one leading doctor who organizes a faculty from the material of the town, or of the neighborhood, an old warehouse is converted into a college building, and clinics chiefly surgical, and made up of the patients of the surgeon, are commenced, with the intention to advertise the great man as their real object. When one medical school is organized, a second must follow. A faculty created from the adherents of one or two great men, does not provide for the remaining "medical talent" of the town, and hence great dissatisfaction is felt. Very soon a new organization is arranged, and the "just claims to recognition" of the hitherto-unrecognized professors are suitably acknowledged. In some instances the city or town having but two or three sufficiently eminent men for the practical chairs, an anatomist, or physiologist, or professor of some other scientific department, is summoned from some distant city. Then the pretence for organizing a new college, is the recognition of "home talent." What motive soever may be alleged for founding the college, the real intention is to obtain the title of Professor, and the supposed privileges and benefits thereunto belonging. Unfortunately, the title becomes cheap, sometimes actually goes a begging in the smaller cities with three or more colleges, for presently the distinction consists in not being a *professor*. Indeed we know of one city, where it is usual in the eulogistic funeral discourses, to say of the eminent deceased, he had been frequently importuned to accept this or that chair in the medical colleges, but had invariably declined.

Amongst the newly-made professors, dissensions are apt to arise. The one great man of the school must be deferred to, and the professors must vie with each other in their efforts to enhance his glory.

Then, again, the great men suppose that they must rise or fall with the fortunes of their institutions; when they are surrounded by medical schools, having an equally energetic purpose to live and flourish, the nature of the struggle can be readily understood. We learn of shifts to make students, of personal solicitations to induce students to enter the school, of honors promised to practitioners to secure their influence over expecting and actual students, and of other practices that touch, it seems to us, on the lowest point of professional degradation. In this heartless struggle, without any principle, the professors, we doubt not, try to do their duty with the inefficient and inadequate means in their hands. As is usual, when they learn of the evil methods by which their school is kept up, some one rebels, and then discussion and disruption follow.

The present scene of conflict is the Columbus Medical College. The history of the existing medical convulsion will serve to illustrate the nature of the others. If the present case did not involve some questions of high importance to the medical profession, we would be little disposed to give it prominence by recognition and discussion.

In the present controversy we learn from the pamphlets that have been published that Dr. Baldwin, then a professor in the school, opposed the

conferring by the Columbus Medical College of the degree of M.D. on a man who was graduated in a month after he matriculated, and whose antecedents were of an unsavory character. Dr. Baldwin united with Dr. Reeves, of West Virginia, in the exposure of these iniquitous practices. Dr. Hamilton, of the Columbus School, denounces Dr. Baldwin for his share in these laudable attempts to correct flagrant abuses. Every right-minded member of the medical profession looks on such exhibitions with unfeigned regret. Divested of all extraneous questions, such is the status of this controversy, and although there have been ample time and opportunity, we regret to say that the authorities of the Columbus Medical College have failed to offer any satisfactory explanation of their action in the case under discussion, and the profession is therefore able to reach but one conclusion.

PECULIAR PARALYSIS OF THE BRACHIAL PLEXUS.

IN 1874 Erb communicated to the Congress of Naturalists assembled at Heidbelberg, the details of four cases in which a peculiar paralysis of the brachial plexus had occurred. The peculiarities consisted in the distribution of the paralysis, and the localization of the lesion. Muscles innervated by very different branches of the plexus were simultaneously affected. The muscles paralyzed were the deltoid, the biceps, the coraco-brachialis, and the supinator longus, which are innervated by filaments from the circumflex, the musculo-cutaneous, and the musculo-spiral. E. Remak, some time afterward, submitted a precisely similar case to the Berlin Medical Society, and recently Hoedemaker has published several new observations. To these German examples are now added two French cases published by Lannois.

The paralysis has usually come on after exposure to cold, and corresponds closely in its etiologic relations to some kinds of facial paralysis. The localization of the paralysis is the point of difficulty. Erb found that there is a place in the brachial plexus near the scaleni where the motor filaments above referred to, unite. In subjects properly trained, the necessary dexterity having been acquired by practice, these filaments may be excited by a fine electrode at a point between the two heads of the scaleni, where the fifth and sixth nerves emerge, causing movements of the deltoid, biceps, coraco-brachialis, and supinators only. Remak, in his case, placed an electrode at the outer border of the transverse process of the sixth cervical vertebra, on the healthy side, and caused, with a mild current, a contraction of the supinator longus, and with a stronger current, a simultaneous contraction of the deltoid, biceps, and coraco-brachialis in addition. An application of the same current strength, on the paralyzed side, caused no movement. The electrical condition of the paralyzed muscles has been the same in all the cases—that is, the electro-contractility is lost.

In Lannois' cases, the most recent thus far reported, the same peculiar localization of the paralysis was observed, and the electro-contractility was also lost.

We may conclude, therefore, that this peculiar malady is a peripheral paralysis—a neuritis probably, of the fifth and sixth cervical nerves which unite with others to form the cervical plexus. The condition, in the cases of long standing, has not been modified by treatment, but the more recent examples have been less intractable and have improved under suitable galvanic treatment.

MISSIONARY PHYSICIANS.

We have recently received several publications relating to medical missions, which have interested us not a little.

Few persons now living can recall the beginning of the missionary enterprise in this country, at least, but the sending of medical missionaries is a matter of quite recent date. At least, so we thought until we were astonished to learn that the illustrious John Abercrombie founded the "Edinburgh Medical Missionary Society" so long ago as 1841. The rewards of successful practice are such that it seems strange at the first blush that any physician should leave bright prospects behind him, and banish himself voluntarily to Asian or African heathenism. That clergymen should do so seems but a natural outgrowth of their profession. But love to God, and the "enthusiasm of humanity" have led no less than one hundred missionary physicians to devote themselves to this self-denying work. These men, at least, cannot be accused of utilizing their kindness as a part of their "stock in trade."

The medical missionary has opened the door more than once to the preacher. Hearts that were closed to all intellectual appeals, became responsive to the glad tidings when brought to them by the physician. Indeed, it is but renewing the lesson of the Judean hills and valleys, for well-nigh all the recorded miracles were miracles of bodily healing. Moreover, it is but just that civilized nations should atone, in some small measure, for the ills they have inflicted on heathendom. Syphilis and whiskey are twin evils which—to our shame, be it said—most surely follow in the wake of our mercantile marine; and to these in China, at least, the curse of British opium must be added.

Such men have done more than merely practise medicine and act as missionaries. True, they have done this, and to no little extent. A neccessary part of their work is the dispensary and the hos-

pital. At Travancore Dr. Thompson reports twenty-five thousand patients in a year, and at Swatow, drawn from twelve hundred and twenty-one surrounding villages, Dr. Lyall has had as high as three hundred and fourteen in a day, his lowest number being forty-six.

But they have added also to our knowledge of the art and the science of medicine, to pathology, etiology, medical geography, materia medica, botany, geography, ethnology, and kindred sciences. Not to allude to older contributions, the late report of Dr. Turner, in the *Glasgow Medical Journal*, on one hundred and thirty-six operations for elephantiasis within seven years, not rarely three or four operations being done in one day, and with a result of only two deaths, is a noteworthy contribution to operative surgery, from Samoa. Dr. Berry, in Japan, is not only doing a vast work in practice and in teaching large numbers of native physicians, but is also attempting to work out the problem of the hygienic treatment of leprosy, and, with the assistance of the government, bids fair at least to limit and ameliorate, if not to extirpate, this loathsome disease. Dr. Palm, also in Japan, has entered upon a work of extreme importance in a nation so progressive yet so barbarous in their obstetric medicine. Under the auspices of the Edinburgh Society he has established a Nurse Training School with Miss Shaw, one of the "Nightingale probationers," from St. Thomas' Hospital, as his head nurse. A movement in this country, a few years ago, to establish such a training school in Japan unfortunately failed for want of due support. But the especial fitness of women for medical missionary work has been more largely appreciated in this country than in any other. Besides numerous women physicians already in the East, the earliest of whom were sent by American Methodists, there were last winter at the Woman's Hospital in this city eight women preparing to go as medical missionaries. Heathen women need such help even more than men, for they are excluded from the help of male physicians, and are victims of the profoundest superstition, ignorance, and cruelty.

All of this work, it must be remembered, is done practically alone. Help there is none within hundreds and sometimes even thousands of miles. We confess that to tackle an eighty pound tumor of the scrotum, with not a single trained assistant to give the ether, or to assist in controlling the hemorrhage, in the sponging, and the mechanical details, would not be entirely attractive. Yet Dr. Turner not only did it, but finished the operation in twelve minutes, and with results as flattering to his good judgment as to his operative dexterity. Indeed, the Edinburgh Society, of whose pupils he is one, only encourages young men of more than the average promise, and urges upon them the importance of acquiring a thorough education. Only men of the highest attainments, as well as the most unselfish devotion, are fitted for the work. This is in accordance with what might be supposed when we look at the names of the men at the head of the enterprise; Abercrombie, Simpson, Scoresby-Jackson, Spence, and Handyside, among the dead; and Grainger Stewart, William Turner, Alexander Simpson, Crum Brown, Patrick Heron Watson, Underhill, and Joseph Bell, among the living, represent the best talent of Edinburgh. The society keeps up a training school and dispensary, aids young men whose means are cramped, and also establishes hospitals and dispensaries abroad wherever most needed, It is entirely undenominational and assists all churches. It issues a neat "quarterly paper" at one shilling a year, in which all the latest medico-missionary news are published.

Any of our readers who desire to obtain further information as to its work, or to subscribe to its valuable paper, can do so by writing to Rev. John Lowe, F.R.C.S.E., 56 George Square, Edinburgh. Its extensive work demands large outlay, and we join with our British *confrères* in commending it heartily to the generosity of those interested in its objects. It graduates five students this year, but the appeals are triple the number of men ready to go.

SOME FUNCTIONAL VISUAL TROUBLES DUE TO CEREBRAL LESIONS.

GRAEFE maintained the view, which still prevails in Germany, that the only disorder of vision due to a mere cerebral lesion is hemianopsy—or loss of half of the visual field. This opinion is based on the semi-decussation of the optic nerve fibres in the chiasm. Charcot, however, demonstrated from clinical facts that a cerebral lesion may cause a sensory hemianæsthesia, accompanied by a sensorial anæsthesia with amblyopia, and that in cases of hysterical hemianæsthesia there may exist an unilateral functional disorder of the brain. At the time when Charcot maintained the existence of a crossed amblyopia as a consequence of a single lesion of the hemisphere, without any lesion of the corresponding optic bands, there had been no anatomical facts to disprove his assumption. Clinical observation, and the facts of pathological anatomy, are necessary to settle the question. Féré has collected seventy-four observations with which to examine the relation of the visual disturbances to cerebral lesions. His conclusions are embraced in the propositions given below:

The only visual disorder, heretofore observed in the hysterical cases of hemianæsthesia, is amblyopia with concentric narrowing of the visual field on

the same side as the disorders of cutaneous sensibility. In certain subjects of cerebral disease, as in the hysterical, the hemianæsthesia may be replaced by a hemidysæsthesia, accompanied by the same visual disorders. In subjects affected with such cerebral diseases as aphasia, hemiplegia, hemichorea, hemianæsthesia, etc., loss of half the visual field, or hemianopsia, is quite often encountered. Amblyopia of cerebral origin accompanies the disorders of cutaneous sensibility, whether of little, or of considerable extent. The anæsthesia or dysæsthesia may be limited to the tissues of the eye.

Cerebral amblyopia may present almost the same symptomatic relations as the hemianopsy. Nevertheless, although pure hemianopsy is frequently associated with aphasia, amblyopia is rarely thus connected, but is found in association with ordinary disorders of sensibility. Cerebral lesions may exist with a disorder of vision resulting from the combination of concentric narrowing of the visual field, and hemianopsy. This affection, which always accompanies other troubles of sensibility, appears to be determined by a lesion situated on the opposite side toward the sensory centre, in the optic tract, the tubercula quadrigemina, or the efferent fibres.

CREMATION.

THE time is rapidly approaching when the problem of the disposal of the dead of our large cities must find some other solution than the cemetery. That cemeteries are noxious to health, and especially when they are on the banks of streams which furnish the water supply of the city, is a point that needs no argument. The advocates of cremation seemed at first more like enthusiasts with a "fad" in their heads; but as time has passed on, it would seem that they are slowly, but surely, winning at least a hearing, and after a time we believe they will win the day—and justly.

From the hygienic point of view, cremation is plainly the best way of disposing of the dead, and, as now conducted, it is done decorously, quickly, and cheaply. The *Pall Mall Gazette* states that in Milan two bodies can be cremated in an hour, the cost being from three to five dollars. The Siemens furnace at Dresden, which cost only $250, is still more quick in its action. There are several furnaces in France, in which the time of incineration ranges from one hour to two, and the cost from four to five dollars. The Kuborn apparatus is intended for the battle-field, and reduces twelve bodies at once in an hour and a half to an indistinguishable mass of gray ashes, so that a dozen of them could dispose of more than 2500 bodies in twenty-four hours. Prof. Gorini, of Lodi, professes completely to destroy a body in twenty minutes by immersing it in a hot solution believed to be chiefly chromic acid.

There are practically but two arguments against it. Sentiment, at least with the general public, is the chief one, and although that will long hold its own, especially while in this country the want of proper facilities makes cremation difficult, yet in the end it must yield. Health must be the first consideration, and the dead must yield to the living.

The other is a more serious one from a professional point of view, for cremation may easily destroy the evidences of poison. But exhumation has won few laurels in our courts of justice, so that we shall lose but little by the proposed change. Moreover, not a few mineral poisons can be readily detected in the ashes, which deprives the argument of at least a part of its force. In spite of its disadvantages, we believe that cremation is by far the best mode of disposal of the dead.

Why will not some enterprising cremationist set up a Siemens furnace in or near one of our large cities? The pecuniary risk would be small, and we have little doubt that, were cremation made easy, practicable, and cheap, it would be resorted to with increasing frequency, and far more than reimburse its proprietor.

ALBUMINURIA IN CONSUMPTION.

IN a certain proportion of the cases of consumption, about six per cent., albuminuria appears as a complication. The importance of this symptom varies with the condition of the kidneys. In the simplest form, it is a mere temporary congestion; but a congestion due to blocking of the pulmonary vessels may after a time set up permanent changes in the renal structures. When permanent from the onset of the symptom, it may be a dyscrasic malady, due to tuberculosis of the kidney, or it may be produced by amyloid degeneration, which is a frequent complication of the suppurating processes of tuberculosis, the kidney being one of the organs attacked.

It is a fact of much interest that when albuminuria occurs, the fever process and the sweating cease, and thus an illusive appearance of improvement is induced. A subnormal temperature has been observed in some cases. When therefore, in phthisis, the usual daily febrile movement does not come on, the urine should be examined. It need hardly be observed that the prognosis will be distinctly affected by the discovery of a permanent albuminuria. When the quantity of albumen present in the urine is large, and the temperature even slightly subnormal, a rapid decline in strength and an early termination may be expected.

SOCIETY PROCEEDINGS.

MEDICAL SOCIETY OF VIRGINIA.

Thirteenth Annual Session, held at Fauquier White Sulphur Springs, September 13, 14, and 15, 1882.

(Specially reported for THE MEDICAL NEWS.)

(*Concluded from p. 361.*)

SEPTEMBER 14TH, SECOND DAY.—MORNING SESSION.

AFTER the reading of the minutes, which were approved, the vote was called for on the following resolution,

CONCERNING THE ELECTION OF OFFICERS,

presented yesterday by Dr. Joseph A. White, of Richmond:

"*Resolved*, That the officers be elected on the second day of each annual meeting; that they shall be chosen exclusively from among those attending the session, and that the President-elect shall make his appointments for the ensuing year before the session closes."

After a lengthy discussion, this resolution was laid on the table.

The committee apointed to express the sense of the Society in reference to the

NEW YORK CODE,

reported the following resolutions, which were unanimously adopted:

Resolved, That this Society views with concern and deep regret the action of so influential a body as the Medical Society of the State of New York at its last annual meeting, whereby an attempt is made to break down the barriers so wisely erected by the Code of Ethics adopted by the American Medical Association and subscribed to by this Society, between the practitioners of the science of medicine and quacks and charlatans, and desires to express in the most emphatic terms its disapproval and condemnation of that action.

Resolved, That we consider the Code of Ethics of the American Medical Association as the best guide we possess for the conduct of medical practitioners, and hereby reaffirm our adherence to it, and deprecate any change unless it shall be made by the American Medical Association, which body we regard as the representative of scientific medicine in this country.

Resolved, That we approve the action of the American Medical Association, whereby it refused to receive the delegates of the New York State Medical Society.

DR. JOSEPH A. WHITE, of Richmond, was then requested to present the

REPORT ON ADVANCES IN OPHTHALMOLOGY, OTOLOGY, AND LARYNGOLOGY.

He first considered the most recent advances as to the *histology* of the eye. Contrary to preconceived ideas, the cornea draws its nourishment from the scleral vessels, and discharges its waste products into the anterior chamber. He noted the pathology of sympathetic eye disease and the modes of its transmission into glaucoma, and the method of relief for its different forms, and the connection between intra-cranial disease and optic neuritis. He remarked upon the alarming increase of refractive troubles—especially myopia—in school children, as a subject of great importance. He referred to some necessary legislation regarding the appointment of color-blind engineers, pilots, etc.

Mydriatics were then taken up. For many years *atropia* has been the sheet-anchor of the oculist. Its chief danger consists in its use in glaucoma and in troubles secondary thereto. *Duboisia* does not dilate the pupil for nearly so long, and cases of glaucomatous symptoms following its use have been reported. In some persons it produces a species of intoxication. Its advantage is that it may be used where there is an idiosyncrasy regarding atropia. He has also used *sulphate of hyoscyamine* and *hydrobromate of homatropine*, especially in refractive troubles, and for ophthalmoscopic diagnosis.

Hyoscyamine (½ per cent. solution) paralyzes accommodation very quickly, and its effects pass off sooner than atropia or duboisia, yet it sometimes produces giddiness and a moderate intoxication. Homatropine is more evanescent in its effects upon accommodation. Thus far, he has seen no report of glaucomatous trouble following the use of either hyoscyamine or homatropine.

Myotics.—Formerly, calabar bean was the only one used. Now we have eserine and pilocarpine. *Eserine* acts more powerfully than pilocarpine. It is used locally in *acute* glaucoma, serpiginous ulcers of the cornea, serous iritis, episcleritis, etc.

Pilocarpine is used both locally and internally because of its stimulant and absorbent properties. All solutions of these drugs are best preserved by first boiling the solution, and then adding carbolic acid in the proportion of one-half grain to the fluidounce.

Iodoform is especially applicable to granular ophthalmia, trachomatous pannus, interstitial keratitis, etc. It has also been used in conjunctival tuberculosis, hypopyon, keratitis, and seems to diminish the purulent secretions.

Boracic acid is used in slight conjunctivitis, in the strength of one to four grains to the ounce of water. He cautioned his hearers against the common use of such astringents as nitrate of silver, lead solutions, etc.

The use of *antiseptics* he considered very troublesome and needless in the after-treatment of cataract. He advised the careful cleansing of the operating instruments and the operator's hands in alcohol.

Optico-ciliary neurotomy was then reviewed in brief. Dr. White insisted that if sensibility in the eyeball returns after the operation, then the eye must be taken out. In this connection he related the history of a case which was somewhat peculiar because of the amount of hemorrhage which followed the operation and continued for some time thereafter.

Turning his attention to *Otology*, he first spoke of *purulent diseases of the ear*. The best treatment is an antiseptic, combined or not with a mild astringent. Boracic acid with zinc oxide or alum forms a good local application; alum, however, is apt to increase the discharge if there is caries. Then apply a bit of absorbent cotton to exclude air, and keep the parts dry.

When *polypi* are present, alcohol, with or without boracic acid dissolved in it, makes the best application where an operation is not undertaken.

The intimate relationship of ear and throat troubles was remarked upon, and the importance of familiarity with the use of the rhinoscope, laryngoscope, etc., was impressed.

The paper was ordered to be published.

DISCUSSION.

In response to an invitation, DR. JOHN N. MACKENZIE, of Baltimore, Fraternal Delegate from the Medical and Chirurgical Faculty of Maryland, in referring to the report presented by Dr. White, said that the great difference of opinion which prevailed in regard to the cure of *throat consumption* arose from the confusion of two distinct forms of ulceration which are met with in the larynx of the consumptive. The classification into catarrhal and tubercular phthisis held here as in the lungs; and by making such a division, order would be restored to the conflicting opinions of authorities, and

a standpoint would be secured for a scientific solution of the various problems which the subject presented, and a guide to prognosis afforded of considerable value to the practical physician. The chronic ulcerative laryngitis of the tubercular patient differed from simple chronic laryngitis in its extreme chronicity, its tendency to relapse, and the frequent occurrence of ulceration which showed no disposition to cicatrize, and, which, if neglected, would eventuate in laryngeal phthisis, although proof of its culmination in tuberculosis was wanting. He believed that the vast majority of reported cases of so-called laryngeal tuberculosis could be referred to the category of catarrhal inflammations. The plan of treating this variety of laryngeal phthisis by thorough local cleansing and disinfection, followed by the direct application of iodoform and morphia to the ulcerated areas, had met with success in his hands; and he considered this method of grappling with the disease as one of the greatest advances which had been made in the control of this troublesome disease. The second form of ulceration—the true tubercular—was much more difficult to deal with; but the fact that pulmonary consumption was curable, the well-known cicatrization of the local lesions of tuberculosis of other organs, as the intestines, and the excellent results which had followed incisions and drainage of pulmonary cavities, would lead, *à priori*, to the possibility of similar success in the treatment of laryngeal phthisis. The laryngeal ulcer is the pathological analogue of the cavity in the lung, and it, therefore, seemed rational to assume, that what was true of the latter, would be equally applicable to the former, especially as in this case local treatment would be more effectually carried out. Dr. M. recommended the constant inhalation of medicated vapors as an adjunct to the treatment, and described the methods in general use. He also spoke of a device which he was in the habit of using—namely, the substitution of cotton pellets in the nose for the cumbersome respirators sold in the shops.

Passing then to the subject of *nasal catarrh*, Dr. Mackenzie warmly advocated its treatment by surgical methods, especially the removal of the hypertrophied tissues covering the turbinated bones, the excision of the pharyngeal, and, if necessary, the faucial tonsils, and he related cases in support of operative interference. As a substitute for surgical operations for the straightening, perforation, or fracture of the deflected septum, Dr. Mackenzie suggested the removal of one or more of the turbinated bones. He concluded his remarks by cordially thanking the society for its courteous invitation, and for the attention with which the members had listened to his crude ideas.

DR. WM. L. ROBINSON, of Danville, reported

A CASE OF EAR TROUBLE RELIEVED BY ELECTRICITY,

which elicited an interesting but very latitudinous discussion by several members.

THE EARLY DIAGNOSIS OF PHTHISIS PULMONALIS

was the title of a "volunteer paper" by PROF. M. L. JAMES, of the Medical College of Virginia, Richmond. He introduced his paper by referring to the fact, that four years ago he had presented a paper before the Society with the title, "The Question of the Curability of Consumption and its Treatment." In that paper he had shown from the opinions of eminent lights in medicine, from the facts of pathological anatomy and from his own experience that many cases of consumption were curable. He stated that in his own experience, however, the cases of cure were limited to two, after the disease had progressed to the establishment of cavities; the cavities in the two cases having been small ones, but that as many as twenty-three cases in his private practice, and of which he had kept careful records, had yielded to the force of remedies in earlier stages. Admitting that he was right in his opinions, Dr. James regarded the question of its early diagnosis as one of the weightiest in Medicine. He conceded that it was not always an easy diagnosis, but for that reason was the more important.

With a brief reference to the pathology of the disease, in which he said the weight of authority established the fact that there was at least a close alliance between true tuberculosis, and those chronic inflammations of the lungs which marked the earlier stages of pulmonary consumption, he proceeded to a review of the symptoms and physical signs which marked the earlier stages, in which he claimed that, while there was much of difference in the violence of the symptoms in different cases of the disease, from those overwhelming invasions which destroyed life in a few weeks, to such as were so feeble in their destructive force as to require years for the termination of their mortal work; still in all cases there was distinct evidence of profound constitutional disturbance, and it was practically important to recognize such variations. He laid much stress upon the presence of fever, which he said applied to all of the cases under his observation at some stages of the disease, though he said that so eminent an authority as Williams had said, that in a few cases it was absent, and sometimes the temperature was sub-normal. He said, however, that in this disease, more than in any other that he had observed attended by febrile phenomena, the exacerbations of the fever were variable, sometimes scarcely departing from the types of the intermittent and remittent forms of malarial fever, while in other cases it would sometimes be absent for several days, or occurring during the day in considerable elevation for so short a period as a half-hour. His description of the type of the fever was variability. He said that the proper recognition of the fever of phthisis could only be made by the thermometer, the surface temperature of the hands and face being entirely fallacious. He thought that every suspected case should be provided with a thermometer and the temperature taken several times in the twenty-four hours, and oftener than the physician in private practice could make observations himself.

He then proceeded to analyze the value of the several symptoms, referring to the presence of the *bacilli*, which Koch claimed would be found in the sputa in the suppurative stages, concluding that unless that could be accepted as established, there was no one pathagnomonic symptom or sign, and that that even was delayed beyond the stage when remedial measures were usually efficacious; but that there was in all cases such an assemblage of symptoms and signs as would justify a positively decisive diagnosis. These he believed to be an impairment of general health, varying much, but always profound, attended with more or less acceleration of the pulse, and febrile exacerbation, and emaciation, with physical signs, first indicating pulmonary congestion, and then consolidation, more or less circumscribed and complete, with at least occasional crepitant, subcrepitant or mucous râles, also more or less circumscribed; impaired expansibility of the lungs; all of which symptoms and signs have been more or less gradually developed, and which have existed for a period longer than two weeks, and have been anticipated by prodromic symptoms of greater or less marked distinctness.

The Committee on Nominations of

OFFICERS FOR THE ENSUING YEAR

presented the following nominations, each of which was confirmed by the Society:

Vice-Presidents: DRS. MEADE C. KEMPER, of Goshen; O. H. BAIRD, of Waverly; JOSEPH A. WHITE,

of Richmond; J. S. APPERSON, of Town House; GEO. B. JENNINGS, of Ruckersville, and J. W. DILLARD, of Lynchburg.

Recording Secretary and Treasurer, DR. LANDON B. EDWARDS, of Richmond.

Corresponding Secretary, DR. HUGH M. TAYLOR, of Richmond.

Chairman of Committee on Nominations, DR. LEWIS WHEAT, of Richmond.

The members of the Executive and Publication Committees, the same as last year.

ELECTION OF PRESIDENT

by ballot, resulted in favor of DR. WM. D. COOPER, of Morrisville, Fauquier County, Va. The retiring president, DR. G. WM. SEMPLE, was elected an

HONORARY FELLOW

of the Society.

Rockbridge Alum Springs, Va., was selected as the

PLACE FOR THE NEXT ANNUAL SESSION.

Time of meeting, either the last week in August or the first week in September, 1883.

AFTERNOON SESSION.

PATHOLOGY AND TREATMENT OF INFANTILE PNEUMONIA,

by DR. BEDFORD BROWN, of Alexandria, was the title of the first paper read, of which the following is an abstract. The lobar and catarrhal forms of pneumonia are the most frequent in infants under a half year of age. The râle of lobar pneumonia is rather coarser and more on the subcrepitant order, with less complete dulness on percussion than in adult pneumonia. Catarrhal pneumonia is the most common form in infants, as well as the most dangerous. The rapid secretion of mucus cuts off proper inhalation, and thus cyanosis occurs. He has seen cases threatened with fatal suffocation in twelve hours. The accumulation of carbonic acid in the blood produces a narcosis that reminds one of opium poisoning. The tendency of this carbonic acid poisoning is also to suppress cough.

The rate of respiration in infantile pneumonia is probably higher than in any other disease—even up to 100 per minute. The *character* of the respiration is therefore very short and quick, and the inhalations enter only a small portion of the air-cells. In the baby with extensive catarrhal pneumonia, the walls around the bases of the lungs do not expand normally, but the muscles of the apex of the chest and those of the back and neck are thrown into extraordinary activity.

The character of the cough.—In proportion to the extent and gravity of the lung disease the cough diminishes in frequency and force, and thus declines to aid expectoration. Such a condition needs artificial stimulation of the function of coughing. The agents used are antiseptic; they disinfect the accumulated matter in the bronchial tubes, and excite these tubes to action, and hence the expulsion of the offending cause. Dr. Brown uses, by spray apparatus, three or more times a day, this solution:

℞.—Alcohol,	℥j.
Water,	℥ij.
Carbolic acid,	℥ss.
Bicarbonate of sodium,	℥j.
Salicylic acid,	℥j.
Chloral hydrate,	℈ss.—M.

The atmosphere surrounding the head and chest as well should be charged with the spray whenever necessary to excite cough and expectoration. This has always, in his experience, excited cough and expectoration, with improvement in the breathing and complexion—at least for the time being, and in some cases he is sure he has thereby saved life.

Character and rate of pulse.—In bad cases the pulse runs up to 200, or even 225 per minute. These high figures of pulse and respiration are never reached in the adult. With this rapid and feeble pulse, each cardiac diastole is so brief and imperfect that very few drops of venous blood are received in the right side of the heart with each pulsation. Hence the tendency of the blood to accumulate in the venous system, producing cyanosis by carbonic acid poisoning, and narcosis, and other consequent effects. And yet patients have recovered even with a pulse of 200.

Treatment.—Digitalis is the best agent to slow the excitable and feeble heart in infantile pneumonia. It is not as rapid and dangerous as veratrum and aconite, but is just as efficient. Belladonna is a valuable adjuvant to the digitalis. It soothes the irritable condition of the sympathetic system. It also curtails superabundant secretion. This is markedly so in cases of catarrhal pneumonia; but belladonna does not suppress cough. The mild preparations of ammonia are particularly valuable in liquefying viscid mucus and hastening its expulsion. The wine of ipecac should never be dispensed with. It is a potent promoter of expectoration. Ipecac exerts an extended influence over the entire sympathetic and vaso-motor systems, and controls hemorrhage and regulates secretion. The combination of soda, potash, or ammonia with ipecac—especially with ammonia—constitutes the very best means of assisting the bronchial tubes to expel their contents. Opium, when moist râles are abundant, is inadmissible. In the use of opium we must be guided by the extent of tissue invaded. If extensive, opium must be discarded. Bromides are especially valuable applications for quieting nervous restlessness and for procuring sleep in the class of cases discussed. In lobar pneumonia, when the muco-fibrinous secretion is very tenacious, the iodides of potash and ammonium, spirits of ammonia, and ipecac are very serviceable.

DR. J. E. CHANCELLOR, of Charlottesville, reported in brief a case which endorsed the views expressed by Dr. Brown.

The *Ex-presidents* of the Society offered

PRIZES

of $50 for the best surgical essay prepared by any member, and $50 for the best medical essay.

The subject selected for the surgical prize was

RECENT PROGRESS IN ABDOMINAL SURGERY.

We make a synopsis of the essay which received this prize, presented by DR. HUGH M. TAYLOR, of Richmond, Va. His report embraced a review of the recent advances in ovariotomy, Battey's operation; extirpation of the uterus, spleen, and kidney; resection of the stomach, bladder, and intestines; operations for pelvic and abdominal tumors and abscesses; and last, but by no means least in importance, the writer thought, operative interference in intussusception, occlusion, and cancer of the intestines, and in gunshot and other wounds of the abdomen and abdominal viscera. Prominent among many who have contributed to the advance of abdominal surgery are mentioned, Tait, Thornton, Billroth, Keith, Wells, Sims, and Thomas. In ovariotomy we find the greatest triumphs in abdominal surgery, and to its successes and teaching is due the present activity in all peritoneal surgery. The writings of Keith, Tait, and Billroth, tend to disprove the value of Listerism in peritoneal surgery, while those of Wells, Thornton, Schroeder, and others of equal eminence, carry great weight in favor of its use. While not an advocate of Listerism, the writer was forced to recognize it as one of the open questions in surgery. The triad of Keith—care, cleanliness, and drainage, is, in the opinion of the writer, the embodiment of antiseptic abdominal sur-

gery. A wide distinction is drawn between Listerism and antiseptic surgery. The opinion that all good surgery is antiseptic surgery is concurred in. The writer reports two cases of ovariotomy, in which the value of drainage was clearly illustrated. The first was a suppurating dermoid cyst, which was so firmly attached to the right iliac fossa, that a large part of its base had to be left *in situ*. It presented a honeycombed, suppurating mass and suggested a hopeless prognosis. In spite of the unfavorable outlook, the patient recovered from the operation and went about the house for six or eight months. The unexpected prolongation of life was due to the fact that nature established two outlets for the pus, one along the pedicle and one into some part of the intestinal canal. The second case was an extensively adherent multilocular cyst, and the traumatic injury done in separating them warned the operators to provide for removal of the inflammatory products. This was accomplished by passing a tube through Douglas's cul-du-sac. For the first five or six days, about a pint of bloody serum was drained through the tube each day; the patient continued, however, to do well until by accident the tube was pulled out. Immediately before this accident the prognosis was favorable. Immediately afterwards the temperature and pulse went up and the patient showed the distended belly, restless delirium, anxious expression, vomiting, hiccup, and all of the symptoms which note the beginning of the end. Drainage, the writer thinks, is indicated whenever any raw surface is left in the peritoneal cavity, as no one can foretell the amount of inflammatory products which circumstances unfavorable to repair may make the most trivial wound discharge. The danger incident to the use of carbolic acid in peritoneal surgery was referred to, and a plea for the substitution of chloral entered. The writer has seen carbolic acid used in peritoneal surgery and a solution of chloral used in the same class of cases, but has failed to appreciate any of the advantages claimed for the former. Chloral, he thinks, provokes and facilitates cicatrization and granulation, opposes the formation and degeneration of pus, and neutralizes or limits the morbific action of all septic poisons. The writer recognizes a field for Battey's operation, but thinks the full limits of its application have not been definitely settled. He has witnessed the effects of this operation by abdominal section in three cases, and while all of them recovered from the operation, the impression has been left that the operation is not free from the dangers common to abdominal surgery.

Nephrectomy, nephrotomy, and nephrolithotomy, and the conditions which call for these operations, are reviewed at length. One case of pyonephrosis successfully treated by nephrotomy is reported. The case occurred in a young man whose family history showed a marked tendency to nephritic troubles. His father was at the time insane from Bright's disease, and his mother was an imbecile from the same cause, while a brother and the patient himself had been operated upon for stone in the bladder. The pyonephrosis was treated by lumbar section, drainage-tubes, and antiseptic washes. The writer thinks, from a study of the literature upon the subject, that extirpation of the uterus for cancer is entitled to the earnest consideration of even the most conservative surgeon; but until there is unity of opinion concerning operative interference in cancer, there must be diversity of opinion concerning extirpation of the uterus for this malady. Extirpation of the uterus for uterine myoma, fibroma, fibro-cystic, and other uterine tumors, he thinks is clearly indicated where life is endangered or rendered unbearable. Porro's and Müller's modification of the Cæsarean operation are dwelt upon, and the operation and claims of gastro-elytrotomy, rupture of the uterus, and abdominal, intestinal, and tubal pregnancy also receive due notice in the report. As a last resort, operative interference in perforation and obstruction of the intestine is urged. The exploits of Billroth, Wölfler, and others in this field of operative surgery are fully brought out in the report. Operative interference for the removal of foreign bodies, for rupture of the bowels from falls, blows, wounds—and especially gunshot wounds—is, the writer thinks, strongly indicated whenever a fatal issue is apprehended. He concludes by insisting that in spite of the bright outlook for abdominal surgery, we cannot ignore the fact that the course over which the patient has to run after the surgeon has invaded the peritoneal cavity is beset with many dangers. The conditions conducing to a favorable or fatal issue are so evenly balanced that the most trivial factor may determine the result. No surgeon, he thinks, can have seen much of abdominal surgery without learning to appreciate the importance of little details—moments spent in controlling hemorrhage, in thoroughly cleansing the peritoneal cavity, and in looking to thorough drainage, are golden moments to the patient. The good resulting from such precautions far outweighs the danger incident to prolonging the operation.

MISCELLANEOUS BUSINESS.

After reference of the above essay and the awarding of the prize, on motion of DR. BENJ. BLACKFORD, of Lynchburg, it was

"*Resolved*, That hereafter, the Committee on Nominations of Officers shall be empowered to submit the nomination of a Fellow for President, together with the other annually elective officers of the Society."

EVENING SESSION.—On nomination, Dr. J. E. Chancellor, of Charlottesville, was elected to deliver the

ANNUAL ADDRESS TO THE PUBLIC AND PROFESSION

next year.

ALCOHOL—ITS USE AND EFFECTS AS A BEVERAGE AND MEDICINE,

was the subject for the Ex-presidents' Medical Prize. DR. JOHN F. WINN, of Richmond, read the first of the medical essays in competition. He gave the history of stimulants as phlogistics and antiphlogistics, passing rapidly from the earliest ages, up to Broussaism, and then to Todd's views. He remarked upon the rapid advance made by the profession since that day, both by clinical experience and physiological experiment, and quoted the resolution adopted by the American Medical Association, in 1878. He estimates the annual amount of spirituous liquors drunk in the United States, to be about 220,000,000 gallons. He next considered the use of alcoholics as beverages. As to the primary action of alcohol, it passes rapidly into the blood, altering the form of the red corpuscles, and causing them to adhere in rolls, and thus destroying their vitality; and by its affinity for water prevents or produces coagulation of the fibrine. Paralysis of the vaso-motor nerves is the next result leading to congestion, which is the first stage of acute alcoholism; the second stage being excitement and exhaustion of the spinal cord, with want of coördination of the muscular system; the third, a stage of unbalanced reasoning and volitional power; and lastly, a stage of complete collapse of nervous power.

With respect to the *food* value of alcohol, he stated at length the views of its advocates as well as of its opponents. It is conceded that the temperature is reduced and the elimination of carbonic acid is diminished, and the weight of authority seems to warrant the assertion that these results are due to the power that alcohol has in delaying metamorphosis of tissue, and that this delay in tissue change is caused by the

oxidation of alcohol into aldehyde and acetic acid at the expense of the oxygen which should be applied to the natural heating of the body. Dr. Winn classified its *secondary* effects into four degrees:

First, the *mechanical* effects, due to arterial relaxation, generally exhibited about the age of 25 or 30, in cardiac hypertrophy and arterial degeneration; in that well-known sclerosis and production of adventitious connective tissue in the various organs of the body.

Second degree is marked by those mental phenomena showing the deleterious influence of alcohol on the cerebral centres, generally indicated by loss of memory and speech.

Third degree marks that stage of insatiable craving for liquor (dipsomania), and those periodic forms of inebriety known as mania-a-potu.

Fourth degree. Here the most solemn fact of these mental and moral obliquities is shown in the progeny of the inebriate, in the form of idiocy, epilepsy, and insanity.

As to its use and effects as a medicine, the therapeutical application of alcohol is so narrowed that it can hardly be called more than a general stimulant. It is not a *direct* cardiac stimulant, but its effects are obtained indirectly through its paralysis of the "organic nervous chain" giving the heart's action increased frequency but "a weakened recoil stroke." Its physiological action does not warrant its employment in the treatment of hemorrhage, unless life is imminently threatened. As a simple antipyretic, it is very inefficient, and should be combined with other antipyretic agents. Its physiological action and clinical experience suggest its use when the heart's action is weak and rapid, the skin and tongue being at the same time dry and harsh. Delirium does not always contra-indicate its use. Congestion or inflammation of the liver or kidneys requires it to be given with great caution. As to dose, the effect produced is the best guide. As a rule, from four to eight ounces of brandy in the twenty-four hours will suffice. He would recommend the general rule laid down by Sir William Jenner and Prof. Loomis—never give stimulants indiscriminately; when in doubt as to giving or withholding stimulants, it is safer to withhold them; when given, watch carefully the effect of the first few doses.

Whether or not alcohol in diphtheria is an "antiseptic" or an "antidote" in the strict sense of these terms, as stated by M. Sauné and Dr. Chapman, there is a diversity of opinion; but clinical experience shows it to be absolutely essential.

In referring to its employment in phthisis, Drs. N. S. Davis and Austin Flint, Sr., are of opinion that alcohol exerts no prophylactic power. The former also believes that alcohol does not retard the development of the disease; while the latter has recorded the history of sixty-two cases of arrested tuberculosis. In nine cases, recovery was apparently complete.

In phthisis, if the effect of administration be that of a cordial, good may be expected from its use; if the effect be discomfort, alcohol will be a disadvantage.

In conclusion, Dr. Winn alluded to the injustice oftimes heaped upon the medical man for being accessory to the perverted habits of some of the unfortunates, and he would insist that physicians be more guarded in their advice as to the use of alcoholic liquors, and when in their good judgment they are indicated, prescribe them as definitely in time and dose as ether or chloroform, or any other agent.

DR. M. G. ELLZEY, of Washington, D. C., next read his essay on the same subject. As a beverage he discussed the effects of a moderate use of alcohol upon persons in health; first in creating a new physiological want, which is not a mere taste, but a systematic demand, peremptory, irresistible, and hereditary. Full statistics fortified this position. When the indulgence is carried to drunkenness, then we meet the deadliest evil of modern times. Dr. Ellzey then passed on to discuss the *Physiological Action of Alcohol*, mentioning well-known facts. He thought that pure old rye whiskey is less dangerous than other whiskeys, or French brandy. The adulterations of beer make it likewise dangerous. All stimulation is temporary and is followed by languor and depression. Referring to Dr. Hammond's experiments, Dr. Ellzey concluded that alcohol may temporarily and successfully supplement deficient food supply without bad consequences, but if the food supply is sufficient, then, even in small quantities will alcohol be followed by unpleasant effects. It should be used only in temporary emergencies or wasting disease. While it is established that some is eliminated undecomposed, the greater part is oxidized in the system. Dr. Ellzey then cited instances of the depressing and exhausting effects of whiskey upon laborers in harvest fields, upon soldiers, arctic explorers, etc.

The Use and Effects of Alcohol as a Medicine, were then pointed out; its advantage to the military surgeon in the field could not be over-estimated, in all cases of formidable surgical shock, in many severe and malignant diseases, in cases of venomous snakebites, etc., the advantage of alcohol in destroying micrococci and bacteria, etc., its value in supplying tissue in typhoid fever, consumption, etc. Especially in the last-named disease does Dr. Ellzey think *old rye* whiskey of great value, even more valuable than cod-liver oil, and the phosphorous compounds. The great need in this morbid condition, as in typhoid fever and other diseases, is *food*. Alcohol, properly used, is a food; and has this advantage, that *it enters the circulation without digestion*. Carbo-hydrates are nutritious only after some chemico-vital changes; all of which processes task the already insufficient supply of vital energy. "But alcohol takes a direct road to the circulation, taxing none of the vital organs, but rather giving a fillip to these energies, *en passant;* and once in the circulation, it enters forthwith upon its usefulness, suffering oxidation and liberating heat and other forms of energy, *pro re nata*." It ought always to be judiciously prescribed and used.

The anæsthetic effect of alcohol was remarked upon. As such it is useful in hysteria, and allied complaints. Especially in tetanus may we obtain great advantage from it. In some forms of dysmenorrhœa, whiskey is of great value.

In view of the hereditary tendency of inebriety, physicians should always be cautious as to whom they administer alcohol.

Dr. Ellzey conceives it to be foreign to the purpose of the essay to discuss the evils of drunkenness. Neither did he attempt to exhaust the therapeutical uses of alcohol.

The facts related by the author "constitute alcohol the greatest of physiological luxuries—a *magnum bonum Dei* in its skilful, scientific, and legitimate use; but in its *abuse*, a destructive and terrible agent, Satanic in its far-reaching, all-pervading power for mischief."

DR. FREDERICK HORNER, of Marshall, Va., as a contestant for the prize, read the third and last of the essays on the same subject. After defining alcohol—stating briefly its preparation, physical qualities, chemistry, history, etc.—he related some instances of its fatal toxicological effects. He spoke of the visceral and cerebral effects of the drug, and the pathological appearances which simulate those of inflammation and softening of the mucous membrane of the stomach, with cerebral congestion and sanguineous or serous extravasation in the brain and lungs. The blood is less coagulable, due to the destruction of fibrin. The improper continuous use of alcohol leads to insanity.

As a beverage, the appetite is generally acquired. As an illustration of the possible hereditary effect of habitual drunkenness, he instanced the case of a boy, 15 years old, arrested in New York for drunkenness. But he was not drunk, nor had he been drinking. He had never been able to walk without staggering. His speech was that of a person intoxicated, and, when excited, he would mutter and reel. But he was the son of an inebriate father. He referred to the annual amount of tax and revenue from alcoholic beverages for 1880, and stated that $700,000,000 were expended for such beverages in the United States annually. He pointed out the fearful amount of crime that seems to result from the traffic, and the great additional expense to corporations caused thereby.

As a medicine, alcohol, in small quantities, as a cardiac and brain stimulant has always been conceded to be useful in adynamic conditions, such as typhus and typhoid fevers, puerperal septicæmia, consumption, diphtheria, after sudden and large hemorrhages, functional gastrodynia, some forms of sea-sickness, some female nervous disorders, etc. For fevers, wine is preferable. Brandy or whiskey is better for blood-poisoning; and lager beer is useful when the nervous and visceral systems are implicated, etc.

In many instances alcohol exerts a pernicious influence on the heart. Alterations in the structure of the bloodvessels sometimes occur. Sometimes the heart's action is quickened, and the blood driven, therefore, more forcibly to the brain. Hence increased danger of cerebral hemorrhage.

Delirium is an example of the toxic effects of alcohol. The habitual use of alcoholics by young persons tends to diseases of the kidneys and liver. In confirmed inebriates, the organs are destroyed. Thus the origin of alcoholic phthisis, fatty degeneration and cirrhosis of the liver, cerebral, spinal, heart, and other diseases.

He closed by an appeal to the profession to be cautious how they administered the drug—"Striving to better, oft we mar what's good."

AWARD OF THE PRIZE.

The first ballot as to the superiority of one of these three essays over the others gave a majority vote to neither of the contestants. Many members who had not heard the full reading of the three essays declined to vote at all. The second ballot resulted as follows: Dr. Ellzey, 14; Dr. Winn, 13.

The prize was accordingly awarded to Dr. Ellzey.

SEPTEMBER 15TH, THIRD DAY—MORNING SESSION.

THE TREASURER'S REPORT

was presented, showing receipts of $720, and expenditures of $713,59, leaving a balance of $6.41 in the hands of the Treasurer, with the Society out of debt. At a later hour, the Auditing Committee reported that the accounts were correct.

ABNORMAL MENSTRUATION

was announced as the subject selected for general discussion. DR. SAMUEL K. JACKSON, of Norfolk, was called on to read a paper which he had prepared, and which bore on the subject named. In response, he reported

SOME CASES OF HYSTERO-EPILEPSY AND HYSTERO-CATALEPSY.

His paper consisted mostly in a detail of cases, with remarks suggested by them. The *first* case was that of a girl, in humble life, aged nineteen. The Doctor found her, five months after the attack began, lying on her back, her head slightly elevated, eyes fixed, complete paraplegia, and probably anæsthesia of the lower limbs, with perfect rigidity of these, and partially of the upper. When she attempted to move her arms, violent and rapid vibrations would occur, the arms being at right angles to the body. She made her wants known only by "grunts." She could not flex her fingers. Some four or five years previously, she was in the habit of jumping off a high porch. One day, she and a companion spent the whole day in this amusement. That afternoon, she had a "fit," which lasted some hours. The fits recurred frequently—especially during her menstrual periods. This state culminated in cataleptic attacks. Dr. Jackson made a vaginal examination. There was retroflexio uteri. Not being prepared to enter at the time upon proper treatment, the Doctor simply elevated the retroverted fundus. Partial relief resulted. At his next visit, the patient was sitting up. She slowly recovered, until she was able to walk on the street.

Case II.—Woman, aged 22, shirt-maker, stout, active, and strong; used *heavy* sewing machine. She had had menstrual "irregularities" often. On one menstrual occasion, a cataleptic attack occurred, which remained four weeks, until her subsequent menstruation. Then she was well for four weeks. She now failed to menstruate, and the same cataleptic condition recurred. Later, the flow became regular, and she is perfectly well. In pointing out the peculiarities of this case, Dr. Jackson called special attention to the fact that, when she was not disturbed, she remained perfectly motionless; there was, also, complete hemianæsthesia of the right side, with exalted sensibility of the left side.

Case III.—April, 1879. Girl, aged 18 years. She was easily excited, and slept but little. Menstruation was deficient, with "irregularity." Much mental perturbation, on account of association with an insane girl, after the patient went to school-teaching. She developed clonic spasms, commencing with a tremulous agitation of the arms—increasing to jerking. Dread of apprehending the lunatic or idiot, above referred to, would greatly frighten her. Such an attack would sometimes end suddenly, and at others she would remain in a cataleptic condition. A curious hoarse barking cough almost always followed these attacks. This cough gradually became relieved.

Case IV.—Miss —, age 15, suffering pains and "nervous tremblings" in both arms, with a sensation as if being "unhooked." Her mother thought she overstudied, but such does not seem to have been the fact. She fell into a profound sleep and so remained for four weeks—the only apparent act of consciousness being that of swallowing after much shaking and slapping. Then imperfect menstruation commenced, during which she opened her eyes; but this was followed by another four weeks of catalepsy, with her eyes wide open. After the subsequent monthly period, there was occasional opening of her eyes, but nothing could arouse her. This condition lasted five months. There was almost total anæsthesia of the whole body with loss of will-power. After the fifth month, she recovered, and became more sprightly than before her attack. The cause of the trouble was very obscure—the deficient menstruation being the only abnormal condition observed. The uterus was normal in size and position; but there was a bend of the sacrum about midway in its length, nearly at right angles, due to a fall in early life. Probably the sacral nerves were pressed upon by the engorged uterus during her monthly period, but no examination proved this to be a fact.

Case V.—Miss —, age 15, sprightly; in April, 1882, had a chill, and another May 4th. She began to jerk and jump. A neighboring doctor pronounced the attacks hysterical. The spells at first lasted from 10 to 20 minutes, but the duration soon increased to from 2 to 4 hours, and they were so violent as to require three or

four men to hold her to prevent personal injury. She would sometimes throw her head back between her shoulders, with her face flat on the bed, and throw her feet back above the head. It was impossible to straighten her. These attacks recurred until the last of June. She began then to go off suddenly into unconscious states, when all at once she would commence laughing and talking to imaginary persons. Sometimes nothing could arouse her—not even the firing of cannon nor deafening peals of thunder. At other times, she could hear the faintest whisper. About June 1st, she came under Dr. Jackson's observation. There had been complete amenorrhœa for two months. Agents used for the relief of this condition mitigated the paroxysms and an entirely favorable change in her condition resulted until August 20th. Since then, there have been strange periods of double consciousness, with cataleptic attacks of from half an hour to two or three hours in duration. In these attacks she would talk as though in company with distant friends and would tell where they were and what they were doing; and, strange to say, letters received by the family from the parties verified her accounts. A number of instances were related where her statements as to distant persons and things proved entirely correct. There is great hyperæsthesia of the optic nerve. She is still under treatment and is improving.

DR. J. E. CHANCELLOR, of Charlottesville, followed with a paper on

ABNORMAL MENSTRUATION.

After defining menorrhagia and metrorrhagia, he said he had met with these forms of abnormal menstruation more frequently than any other. General plethora, certain climates and habits of life, chronic metritis, chronic degeneration, fibrous tumors, polypi, fungous affections of the womb, retained products of conception, subinvolution, displacements of the uterus, were among the more prominent causes named. As regards displacements, Dr. Chancellor thinks "when retroflexion gives rise to a diminished menstrual flow, we have the attending chronic inflammation, with hypertrophy; and when retroflexion is attended by menorrhagia or increased flow, we have subinvolution of the organ." He laid special stress upon subinvolution as a cause of menstrual abnormalities.

Treatment consists in quiet, cool apartments, hard bed, iced acidulated drinks, cloths wrung out of cold water applied over the vulva, anus, and thighs, elevating foot of bed, judicious use of hæmostatics—such as ergot, gallic acid, cannabis Indica, etc. In more serious cases, tampon the vagina with a bag of powdered alum, or apply tannic acid to the os; or, after dilatation of the os with tents, hot water may be applied with a sponge; or then tincture of iodine may be used, or even, if necessary, one part of solution of persulphate of iron, diluted with two parts of water. Of course here and there the curette may be demanded. He closed his paper with the report of a case of metrorrhagia, in which the curette saved the life of the wife of a member of the Society.

A general discussion followed, but it took such wide latitude that it would be impossible to do justice to the speakers, without reporting in full their remarks.

Diphtheria was selected as the subject for discussion at the next annual session, and the Society, after adopting the usual resolutions of thanks, adjourned.

RHODE ISLAND MEDICAL SOCIETY.

Quarterly Meeting, held at Providence, Sept. 21, 1882.

(Specially reported for THE MEDICAL NEWS.)

THE Society assembled at 10 A.M. in Lyceum Hall, Providence, the President, DR. JOB KENYON, in the chair.

DR. GEORGE D. HERSEY, *Secretary*, read the records of the annual meeting, which were approved.

REPORTS FROM DELEGATES TO OTHER SOCIETIES.

DR. J. H. ELDRIDGE, of Greenwich, delegate to the American Medical Association, made a verbal report. The cordial and unlimited hospitality extended to the delegates was alluded to in terms of highest praise, as were also the men representing the profession throughout the West and Northwest.

DR. W. E. ANTHONY, of Providence, delegate to the New Hampshire Medical Society, made a verbal report, and DR. W. O. BROWN, of Providence, delegate to the Massachusetts Medical Society, presented a written report.

THE CENSOR'S REPORT

was next read by DR. S. S. KEENE, Secretary of the Board.

The following named gentlemen were recommended for fellowship and duly elected: Drs. George F. Bliven, Charles E. Woodbury, and Frederic T. Rogers.

DR. J. H. ELDRIDGE then read a paper on

TEDIOUS LABOR FROM RIGID OS.

The great frequency of protracted labors from this cause was alluded to—occurring chiefly in short and stout women in high health and primiparæ. It was not the writer's intention to consider those cases due to malformation of the maternal pelvis—to fœtal deformity, to spasm of the lower segment of the uterus, or to a previous occlusion of the os. The physiology, duration, and object of the first stage of labor were spoken of. This stage prolonged, painful, and the most distressing, often in *normal* cases, in *abnormal* ones, amounts to the fiercest internecine strife between the nervous organism of the patient and her powers of endurance. The traditional treatment of these cases of forty or fifty years ago, was mentioned, viz: The dose of castor oil, the emollient enema, venesection, tartar emetic, ipecac, belladonna ointment to the cervix, and most important of all "patience," or giving nature time to do her perfect work. In more recent years the use of ether, chloroform, chloral hydrate, opium, dilators, the colpeurynter, etc., has greatly modified the conduct of such labors.

The writer had found the use of chloral of the greatest service—in dose of gr. xv per orem, or gr. xx per rectum, and repeated every two hours if required, to blunt the sensibilities and cause drowsiness. When the os, between pains, is an inch or an inch and a half in diameter, and yielding little or none, it may be advisable to hasten dilatation by gently introducing the fingers during the pains, or to press back the anterior lip of the os over the fœtal head. In many cases it is necessary to decide whether to hasten the labor on to delivery, or to give the nearly exhausted patient a period of rest, to accomplish which a subcutaneous dose of morphia may be employed. A full dose of quinia (grs. xv) may sometimes be given for its decidedly stimulating effect on the uterus, when such effect is desirable.

The writer then briefly gave a few cases from his own practice.

Case I.—Occurred in 1855. Woman 38 years old—her third confinement. She had been in labor 24 hours, was much fatigued and very irritable. On examination the os was found to be high up, but little dilated, and very rigid. The patient was at once raised up in bed and "bled" freely from the arm. At the end of half an hour the os was much less rigid, and a natural delivery occurred within an hour.

Case II.—Was that of a woman 40 years old, stout, in fine health, and in her third confinement. The membranes ruptured early, the os was rigid and high up, and progress very slow. Ether was asked for by the

patient and administered for eight or ten hours. When not under its influence the woman was wild and unmanageable. A safe delivery resulted, but the case was trying to the operator and to the family.

Case III.—Was that of a primipara, on the third day of labor the os uteri was sensitive and rigid. Chloral hydrate, ℈j in aq. ℥ij, was given per rectum, and repeated twice at intervals of two hours. The effect was prompt and satisfactory.

The writer, in closing, deprecated the growing tendency to interfere and hasten normal labors, and said the lying-in-woman, during the tedious first stage of labor, should be patiently and tenderly managed.

On motion, Dr. Eldridge's paper was referred to the Committee on Publication.

DR. ANTHONY then read a paper written by DR. GEORGE CAPRON, entitled

MISCARRIAGES AND SOME INCIDENTAL REMARKS ON CLOSELY ALLIED SUBJECTS.

The writer had come to the conclusion that the prevalent conduct of miscarriages was not the safest or most advantageous, though he made no pretension to having kept the run of all that had been published on the subject, even in New England, and the opinions now advanced were formed regardless of authority, and based wholly on personal experience in a practice covering sixty years.

When called to attend a case of uterine hemorrhage, where an impending miscarriage is suspected, there is urgent necessity of making a certain diagnosis. The length and position of the cervix, the mammæ and areola, the color of the mucous membrane of the vulva and vagina, which in the pregnant state changes from the bright-red or vermilion tint to a dingy purple, and morning sickness, were said by the writer to be the most reliable diagnostic points, though no one of them alone was sufficient.

In regard to the prognosis, in case of threatened miscarriage, if the patient has had a chill followed by headache, if pains are occurring regularly, if there is hemorrhage accompanied by coagula, and if the os is so patulous as to allow the examiner's finger to touch the ovum, there can be little hope of prevention.

In the treatment of these cases there is no specific medicine that will be efficient in case the membranes have ruptured, or a portion of the placenta become detached. The virburnum primifolium may be used, along with perfect rest in bed, cooling acid drinks, light diet, opium, and the application of *cold* to check hemorrhage. If it is possible to remove the ovum, do so, when the contraction of the empty uterus will check the hemorrhage. But in cases where the os is but little dilated, and the ovum cannot be extracted, and the hemorrhage is so free that it is not safe to wait for the action of cold or opium, it is advisable to use the tampon. The writer prefers wads of cotton, wet in solution of alum, for the tampon, and if the use of the speculum is not practicable, by inserting two or three fingers of the left hand back of the perineum, the operator can readily introduce the cotton plugs. If clumsily done, however, tamponing is painful to the woman, and in post-partum hemorrhage at term, it is unsafe.

Having had no personal experience in the use of *hot* water as a hæmostatic, the writer only asserts the excellence of *cold* water or ice applied in the vagina or even within the uterus itself.

Many miscarriages are attended by very severe pain; these require the use of morphia, and if antimony is combined with it, the danger of inflammation is diminished. Ergot should not be given until the os is sufficiently dilated to admit the expulsion of the ovum, which otherwise might be shut in by the contracted uterus. Ergot is very reliable and sure to produce its effects, and hence must be given with great care and caution. The writer had used matico at times with good success.

A most important question is in regard to the placenta in case a small fœtus is expelled, leaving the after-birth partly or wholly within the uterine cavity.

If the placenta can be removed easily, it is best to do so, but it is not safe to forcibly extract it by any method, and thereby admit air into the womb. The danger is much less from allowing it to remain. Even if the placenta protrudes through the os, it may not be safe to remove it. If there be considerable resistance to its removal, leave it to nature.

In labor at term the placenta should always be removed if its expulsion does not occur naturally, and a very important question is the period of gestation at which the placenta may, with safety, be left to return. After *six* months it is safer to remove it.

The condition called septicæmia, the writer thought a most mysterious one, and one that was not recognized or heard of fifty or sixty years ago. In a series of twenty-five hundred lying-in cases that had come under his own personal knowledge and observation, there had occurred only one case of septicæmia.

On motion, Dr. Capron's paper was referred to the Committee on Publication.

DR. E. P. STIMPSON gave some interesting

STATISTICS OF VACCINATION.

He had used bovine virus only, and had vaccinated 523 times in 481 individuals; the operation was successful in 207 primary and 220 secondary cases. One individual had previously been vaccinated thirty times with no effect. The thirty-first time was completely successful.

Reports of cases were next called for.

DR. E. T. CASWELL reported

FIVE CASES OF LITHOLAPAXY

performed by him since last March, making ten in all that he has reported.

In this last series of five—

Case I.—Was that of a man aged 60 years, stout and fat. The stone—of uric acid—weighed 173 grains. Time of operation, a little more than an hour. Good recovery.

Case II.—Age 69, the stone was uric acid, and 47 grains in weight, but had caused very severe symptoms.

Case III.—Man 47 years old. At a previous examination a sound, passed seven and a half or eight inches, struck a stone, which gave a positive metallic clink, but did not seem to be in the bladder. At the time of the operation the sound apparently dislodged the stone, which on crushing proved to be soft. It weighed but 15 grains dry, and on examination proved to be necrosed *bone* with a thin incrustation of phosphatic salts.

Seven weeks after the operation, Dr. Caswell was called to see the man again, and found a perineal swelling simulating an abscess, but on opening it no pus was found. This swelling entirely subsided, and in two weeks time there was to be found a suspicion of bone at the bottom of the opening, which had no connection with the urethra. The patient had had no history of syphilis, or of injury, or of abscess; nor had he ever introduced anything into the urethra. The origin of the necrosed bone was therefore entirely uncertain.

Case IV.—Patient was a woman aged 51. The stone weighed when dry 100 grains. (This case was reported in THE MEDICAL NEWS for August 26, 1882.)

Case V.—The patient was a stout middle-aged man aged 59. Stone weighed 1040 grains *wet*, and 815 grains *dry*. Two hours were occupied in the operation. There were two calculi—uric acid—one having an oxa-

late of lime nucleus. The patient recovered well, and was out in ten days from the time of the operation.

DR. CASWELL further remarked that he had entire confidence in the operation which was not objectionable in patients of any age, and was much less dangerous than lithotomy. One thing is certain—the element of time in operating need not be taken into account, and the operator should not attempt to do quick work, gentleness in manipulation being all-important.

DR. D. E. CONE, of Portsmouth, reported a case where a phosphatic calculus formed on the end of a silver catheter that was allowed to remain in a patient's bladder for four weeks. The calibre of the catheter was also incrusted with the same deposit.

DR. BATCHELDER, of Cranston, mentioned a similar case.

DR. W. J. BURGE, of Pawtuxet, reported a case of *Puerperal Eclampsia*.

The Society then adjourned.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, September 7, 1882

J. SOLIS COHEN, M.D., VICE-PRESIDENT, IN THE CHAIR.

Case of Carcinoma Mammæ (presented by DR. C. B. NANCREDE, for Dr. Charles Wirgman).—Mrs. Josephine M., aged 48 years, married at 23, the mother of three children, the last born sixteen years ago. Had nursed all her children, but the last died from marasmus, owing to the small amount of milk the mother had, although lactation was free after the first two confinements. She never had had any abscess of breast, traumatism, or eczema of the nipples, although she had always experienced pain and uneasiness in the right breast when nursing. There was no trace of carcinoma in family history. A sister had had an enchondroma of one of the metacarpal bones. When young, the patient had suffered from dyspepsia, and on one occasion had had an attack of hæmoptysis. Of late years, Mrs. M. has grown very stout, although never robust nor strong. About the middle of June, 1882, she first noticed a lump in her right breast, at its upper inner quadrant, about the size of a hen's egg. A few nights previously she had been awakened by a severe lancinating pain in the right breast, but, experiencing no further inconvenience, she paid no attention to it. The mass did not seem to grow till after an exploring needle had been inserted, when the growth became softer, much larger, painful, and the skin and superjacent veins rapidly showed marked changes. I saw her Aug. 6, 1882, with Drs. Wirgman and Hearn, when the only additional points to be noted were that the growth was freely movable with the breast upon the chest walls, and that a mass the size of a pigeon's egg could be felt in the axilla, under the outer margin of the pectoralis major muscle. Dr. Wirgman removed the whole breast by two semicircular incisions, opened up the axilla, and removed all the glands up to the clavicle. This operation again emphasizes what Dr. S. W. Gross has specially insisted upon, viz., that although the axillary glands may appear before operation uninvolved, that when the axilla is opened, numbers are often found enlarged. This accords with my own repeated experience. Although slow in healing, the case has done well since operation.

This case presents special points of interest, to which I desire to call attention. In the first place, its history and appearance were eminently suggestive of a rapidly forming sarcoma, which was either cystic or what at once suggested itself to me before etherization, one into whose substance hemorrhage had occurred. Upon careful examination under ether, the discovery of the enlarged gland at once suggested the strong improbability of sarcoma, which view I abandoned. After the removal the macroscopic appearances once more threw doubt on the diagnosis, as there was for at least one-half, if not more, of the circumference of the growth, a distinct *appearance of a capsule*, and, as I had surmised, the tumor had been broken down by a hemorrhage into its substance. Subjected to microscopic examination, the specimen was again puzzling, since sections of the first piece embedded showed in every portion of their extent, with a few very slight exceptions, small spindle-cells of a connective-tissue type. Dissatisfied, I embedded a second piece, sections of which revealed a typical carcinoma of the soft variety. This again illustrates what I have many times insisted upon in this Society, viz., that either very large sections of growths should be made, as Dr. Seiler advocates, or sections from several and varied portions of the morbid mass should always be carefully examined.

Recurring Carcinoma of Mamma and Axillary Glands (presented by DR. C. B. NANCREDE).—The patient, Mrs. F., æt. 37 years, from whom the specimens were removed before the discovery of the primary tumor, about eighteen months back, was in perfect health, although from pecuniary losses she had undergone much mental anxiety since the Chicago fire. Hearing a vivid account, from a friend, of another case of carcinoma mammæ, her mind became deeply impressed, and shortly after she discovered a growth in the upper inner quadrant of the left breast, which continued to grow until it had attained at the time of the first operation to the bulk of a small orange, viz., one year after her first discovering it; she lost much flesh, from the time of the discovery of the growth; she had never suffered from any form of traumatism; had had no eczema of the nipple, and although she had borne one child a number of years back, and had suckled it, had never had sore nipples. There was nothing which could be fairly construed as an hereditary history of carcinoma. The primary operation had consisted in a removal of part of the breast. In less than two months after this a small nodule appeared in the cicatrix, while the axillary gland began to enlarge rapidly. On July 8, 1882, I saw her in consultation with Drs. R. R. Taylor and Harlow, when I found that there was a small nodule in the middle of the original cicatrix, while the axilla was occupied by the mass of indurated glands, which I here present. The growth partially embraced the axillary artery, since when the former was compressed the radial pulse was decidedly affected. Not being allowed to remove the whole breast, I freely excised the small recurrent growth, and after a tedious dissection removed the axillary tumor, laying bare the artery and vein for a space of over an inch, clearing everything out to the clavicle, and distinctly recognizing the coracoid process of the scapula. Although not the place for a clinical discussion, I cannot refrain from emphasizing the importance of the thoroughness with which this axillary dissection should be performed. Not a single gland should be left, enlarged or not. Properly conducted, there is hardly any hemorrhage, a vessel rarely requiring ligature. This case was treated on Listerian principles, but with a spray of acetate of aluminum, and the wound was dressed with the same. There was no inflammation, heat, pain, nor subsequent induration, and, if I remember rightly, the case required but five dressings, until the wound became superficial, and fewer would have been necessary had perfect coaptation been secured. One or two points where stitches made marked tension showed a surrounding skin blush, which disappeared on the removal of the stitch; immediately contiguous to this the wound-edge looked as

if made but a few minutes before, thus showing that the irritation of *tension* was the trouble, which, as before said, very rapidly disappeared when the deeply imbedded stitch was cut. The temperature rose to 100.2° at the end of the first twenty-four hours, after which it remained under 100°. The pain after the removal of the pressure of the button-stitches amounted practically to nothing, according to the patient's own statements, and it will be remembered that she had the experience of a former operation for comparison. I believe that this is the first case where acetate of aluminum has been used in this city in a Listerian operation, and its success disposes of the absurd statement that carbolic acid *is* Listerian.

Carcinoma of Stomach (presented by DR. J. H. MUSSER).—The clinical aspects of this case were so definite that when this man applied to the Medical Dispensary of the Hospital of the University of Pennsylvania, for treatment, early in April of this year, it was without difficulty that malignant disease was diagnosed. He was a farmer of good habits, 53 years old, and previously in good health. For the last six months he had suffered from "weakness of the stomach," and general debility, which prevented him from working. He had lost much flesh, and had constantly a severe sickening pain in the epigastrium extending to the upper part of the lumbar region, which became much worse within an hour after eating. Appetite was poor, tongue clean and pale, bowels constipated, with troublesome flatulence. A tender, non-pulsatile, movable tumor extended across the epigastrium from the margins of ribs on the one side to a similar site on the other, one inch and a half above the umbilicus. He presented an anæmic, cachectic appearance.

Dr. H. Plank, of Morgantown, took charge of the case, and wrote me April 21, 1882, that he was much benefited by the treatment instituted, but was confined to bed by sheer exhaustion. June 5, the Doctor reported increased weakness and emaciation, and that the pain had extended along the left side to the same shoulder. He took but little nourishment and he commenced vomiting, June 10, undigested food, mucus and grumous purulent matter. He died June 20, of exhaustion, after a nine months' illness.

Dr. Plank kindly sent me the specimen I here present. One fourth of the pyloric end of the stomach is involved in the growth, which extends along the greater curvature for four inches, along the lesser two inches, and completely encircles the organ. The stomach walls in front of the diseased mass were dilated, the muscular coat being hypertrophied, and the mucus membrane congested. The mass encroached upon the calibre of the viscus so as almost to occlude it. The tumor consisted of three nodules, one of which was ulcerated on its mucus surface, and presented the appearance of a scirrhus. The glands in the lesser omentum were diseased.

Spindle-celled Sarcoma of Thigh (presented by DR. J. HENRY C. SIMES).—The patient, from whom this specimen was removed, presented himself for admission to the Episcopal Hospital, on August 30, 1882. He is 60 years old, an Irishman, and gave the following history. Two years ago he first noticed at the lower and outer part of the thigh, a small swelling, which grew rapidly to the size of a hen's egg, when it was removed. Shortly after the wound had healed, a second tumor was noticed in the cicatrix, having the same characters as the previously removed growth. This was also removed by operation, and again, in a still shorter interval, a third similar growth was developed in the same locality, which was also removed by the knife. When admitted to my wards, there was found, upon examination, at the lower and outer part of the thigh, a linear cicatrix about two inches long, beneath and adherent to which, as well as to the surrounding integument, was seen a tumor as large as a walnut, movable upon the deeper tissues, painless, dense, and irregularly nodular. There was no glandular enlargement observable. No other tumors were present. The tumor was readily removed, being adherent only to the overlying skin, which was included in the incisions. Microscopic examinations showed that the neoplasm consisted entirely of large spindle-shaped cells, which contained large oval nuclei.

NEWS ITEMS.

THE PROGRESS OF THE YELLOW FEVER.—The convalescence of Brownsville, Texas, may be considered as having been established during the past week. It has suffered and has recovered. Hitherto, quarantine has been directed to preventing egress from the infected district; it may now well assume as part of its duty, the prevention of the ingress of fresh material, until the season of propagation has ended. The guard of one hundred and thirty men, established by the Marine Hospital Service between Laredo and Corpus Christi, has been withdrawn, as there are now no points of infection in Star and Hidalgo Counties, except in the vicinity of the river. The *Cordon Sanitaire* is now extended along the river from Laredo to the Arroyo Colorado.

At Pensacola, Fla., the disease continues unabated. The daily telegrams of the health board show that many of the cases are among the colored population. Hospitals have been established during the week for facilitating the nursing of indigent patients. To date (Sept. 25) there have been reported 517 cases and 54 deaths, as follows:

Up to and including Sept. 18, 217 cases, 29 deaths.

Dates.	Cases.	Deaths.
September 19th, . . .	26	4
" 20th, . . .	41	6
" 21st, . . .	60	2
" 22d, . . .	43	2
" 23d, . . .	36	5
" 24th, . . .	39	4
" 25th, . . .	55	2
Total, . . .	517	54

These have occurred in the city. No reports have been published concerning cases which may have developed among the shipping, although we know from the appearance in Hampton Roads of an infected vessel from Pensacola that there have been such cases.

The navy yard continues free from fever by virtue of a vigilant non-intercourse quarantine against the infected locality. There is much destitution among the 1700 residents in the guarded reservation. Except the paid pickets and a few laborers in the yard, no one has employment. Food is exceedingly scarce, as they are cut off from the outside world. The health authorities of Mobile have been requested to despatch a steamer with provisions for their relief.

On account of the continued freedom of New Orleans from fever, the precautionary guard instituted by Mississippi and other States on the river over their traffic with that city, will be discontinued on September 30th. The Louisiana Board of Health has not accepted this surveillance over the condition of New Orleans with the cheerfulness and good-will which it promised at the outset. It will be correspondingly relieved at the termination of the inspection system.

The following is a summary of the progress of yellow fever at *Brownsville, Texas*, for the *week ending September 23*, furnished by the Surgeon-General of the Marine-Hospital Service, compiled from official returns:

Dates.	Cases.	Deaths.
September 17th,	27	1
" 18th,	19	4
" 19th,	14	1
" 20th,	18	1
" 21st,	8	1
" 22d,	4	1
" 23d,	9	0
Total,	99	9
Previously reported,	1,771	94
Total during epidemic	1,870	103

In addition to above, there were two cases—no deaths—for Sunday, the 24th inst., which will be included in next week's summary. Five new cases and one death on Monday.

Reports indicate that the disease has been confined within the Arroyo Cordon on the Texas side, but that it has extended to many of the river towns and ranches on the Mexican border of the Rio Grande as high up as Guerrero. The Corpus Christi and Laredo Cordon has been removed and guards placed along the river, making a new cordon extending from the Arroyo to Laredo, thus cutting off all communication with the infected districts in Mexico.

At Point Isabel (inside the Arroyo Cordon) official reports give the following.

Dates.	Cases.	Deaths.
August 29th,	10	0
" 31st,	8	1
September 16th,	8	1
" 22d,	4	1
Total,	30	3

Official reports from *Pensacola, Fla.*, by mail, have been received by the Surgeon-General, to include the 21st of September, as follows:

Dates.	Cases.	Deaths.
September 16th,	19	1
" 17th,	8	0
" 18th,	27	1
" 19th,	26	4
" 20th,	41	6
" 21st,	60	2
Total,	181	14
Previously reported,	163	27
Total during epidemic,	344	41

CHOLERA IN JAPAN.—During the ten days from August 21st to 31st, there are reported as having occurred in Yokohama and vicinity, 465 new cases of cholera, and 281 deaths. Total since commencement of the epidemic, 3266 cases and 2000 deaths. On the 30th of August, an American, named Blass, was seized with the disease and died in less than twelve hours. He is the first adult foreign resident in Yokohama who has been attacked.

CHOLERA IN THE PHILIPPINE ISLANDS.—The cholera epidemic in the Philippine Islands, is still making fearful ravages, although the mortality is much less than it was a few weeks ago. At the beginning of this month the deaths in Manilla alone averaged 300 daily, and during the last two weeks of August, there were 4,550 deaths from the disease in the single province of Yloilo. The deaths at present number about 50 daily in Manilla, but reach the terrible total of nearly 200 in the surrounding country.

SMALLPOX IN ILLINOIS.—The Secretary of the State Board of Health, under date of September 20th, reports that smallpox is now practically at an end in Illinois. The efforts to obtain complete immunity by vaccination, however, should not be relaxed, for whenever there exists any considerable number of unprotected persons there is danger, as is shown by the history of the recent local outbreaks. That in Monroe County was caused by an infected mattress thrown into the Mississippi River, and which lodged on Staten Island, near Harrisonville. Some unvaccinated persons came in contact with the mattress, and a number of cases ensued. Thence it was carried into Randolph County, where it found a number of other unvaccinated individuals near Prairie du Rocher, and caused an outbreak among them, with three deaths at date of last report, September 14th. In Alexander County, near Goose Island and Promised Land, some nineteen cases and four deaths have resulted from infection brought also from the river. All these cases were among unvaccinated persons.

From present indications, the chief source of danger is along the Mississippi River, south of St. Louis. The Immigrant Inspection Service of the National Board of Health has diminished the danger of importations from the east to the minimum. Many of the Mississippi and Arkansas River counties have, however, been severely visited, and the conditions of life among the negro population of that region are not such as to warrant the belief that the contagion will be readily "stamped" out among them. It is liable to be introduced into the State from this source at any time until the disease dies out there for the want of material. And whenever introduced, it will find its victims among the unprotected.

HARVARD UNIVERSITY VETERINARY SCHOOL.—A veterinary department is to be opened at Harvard this fall. The course is arranged to cover three years of theoretical and practical instruction.

UNIVERSITY OF LOUISVILLE.—The Faculty of the Medical Department of the University of Louisville has undergone some very important alterations. Prof. T. S. Bell is transferred from the chair of the Science and Practice of Medicine, to the newly created chair of State Medicine and Sanitary Science.

Prof. L. P. Yandell, so long the popular teacher of Materia Medica and Therapeutics, and more recently the occupant of the chair of Diseases of Children and Dermatology, will hereafter teach the Principles and Practice of Medicine and Clinical Medicine.

Prof. Parvin, formerly of Indianapolis, the well-known editor of the *American Practitioner*, has accepted the chair of Obstetrics, made vacant by the death of Prof. Crowe.

Prof. Holland has been transferred to the chair of Pathology, Clinical Medicine, and Diseases of the Nervous System, and Dr. Roberts has been promoted to the chair made vacant by the death of Prof. Cowling.—*Nashville Journ. of Med. and Surg.*, Sept. 1882.

STATE ANALYSTS.—Prof. E. S. Wood, M.D., of Harvard College, and Prof. B. F. Davenport, M.D., of the Massachusetts College of Pharmacy, have been appointed the analysts under the Act relating to the adulteration of food and drugs in Massachusetts.

JAPANESE MEDICAL LITERATURE.—Two hundred and sixty-seven medical works were published in Japan in the Japanese language in 1881.

POISONOUS BULLETS.—A German journal refers to a discovery by M. Gros, of Paris, with regard to the complaints which were made of the use of poisoned bullets by the combatants on both sides during the Franco-

German war. He explains that the construction of the modern breech-loading arms causes the bullet to convey with it a portion of the hydrocyanic acid which the explosion of the powder has caused to be accumulated in the barrel. Even if poisoning to a mortal extent does not take place, it is remarked that the healing of wounds is materially retarded by this circumstance.—*Medical Times and Gazette*, August 26, 1882.

AN HONORABLE CITIZEN.—The *Monthly Sanitary Bulletin*, of Lowell, Mass., for August, gives an account of the abatement of a soap-boiling nuisance which was established fifty years ago when there were few houses in the locality, but which is now surrounded by a dense population. In consequence of complaints coming to the Board of Health, its members called on the owner, rehearsed the complaints, and stated what was the law and its decisions on the subject, whereupon a prompt acquiescence was given to the requirement of the Board to have the grease rendering establishment removed to a less thickly settled locality. "This decision," says the *Bulletin*, "while it will highly gratify the residents in the vicinity, reflects honor upon the owner, as he must make quite a sacrifice in the change."

KOUMISS.—Koumiss, made at home, costs about fifteen cents a quart. The *Ledger*, of this city, gives the following recipe for its manufacture: "Fill a quart champagne bottle up to the neck with pure milk; add two tablespoonsfuls of white sugar, after dissolving the same in a little water over a hot fire; add also a quarter of a two-cent cake of compressed yeast. Then tie the cork on the bottle securely, and shake the mixture well; place it in a room of the temperature of 50° to 95° Fahr. for six hours, and finally in the ice-box over night. Drink in such quantities as the stomach may require. It will be well to observe several important injunctions in preparing the koumiss, and they are: 1. To be sure that the milk is pure; 2. That the bottle is sound; 3. That the yeast is fresh; 4. To open the mixture in the morning with great care, on account of its effervescent properties; 5. Not to drink it at all if there is any curdle or thickening part resembling cheese, as this indicates that the fermentation has been prolonged beyond the proper time." Make it as you need to use it. The virtue of koumiss is that it refreshes and stimulates, with no after-reaction from its effects.

INJECTION OF SALT SOLUTION AFTER HEMORRHAGE.—DR. E. SCHWARZ reports, in the *Berliner klin. Woch.*, August 28th, a case of collapse from hemorrhage in which he injected 1000 cc. of 0.6 per cent. salt solution. The patient regained consciousness, but died in six days.

HEALTH IN MICHIGAN.—Reports to the State Board of Health, for the week ending September 16, 1882, indicate that remittent fever has considerably increased, and that diarrhœa, bronchitis, cholera infantum, cholera morbus, neuralgia, and whooping-cough have increased in area of prevalence.

Including reports by regular observers and by others, diphtheria was reported present during the week ending September 16, and since, at 20 places, scarlet fever at 8 places, measles at 2 places, and smallpox at 2 places, as follows: in Berlin Township, Ionia County (convalescent), September 12: at Ionia, September 18.

PUBLIC HEALTH IN CONNECTICUT.—The Secretary of the State Board of Health, in his monthly report, states that the mortality for July was exceptionally large, especially in the cities, and that cholera infantum stands first among the causes. Typhoid fever is reported to be steadily regaining its old prominence, while not entirely displacing malarial disease. Smallpox apparently is at last stamped out. There has been very little scarlet fever reported, and the mortality is slight. Whooping-cough still prevails. An epidemic of measles was reported from Nangatuck, and it reappears in the mortality tables in several cities. Stamford, South Manchester, Oxford, and Wilton, report quite a prevalence. Diphtheria is reported at Montville, Mystic, Norwich, Avon, Suffield, and Plainfield, Malarial diseases are prevalent, the type ranging with the duration of the disease.

THE SIBERIAN PLAGUE.—A telegram to the *British Medical Journal*, reports that the Siberian plague is manifesting itself in an unusually widespread and alarming manner. Reports of its appearance have been received from the most widely separated quarters of European Russia, and a case of death from the pestilence is announced from Odessa.

OBITUARY RECORD.—DR. GEORGE CAPRON, the oldest physician of Providence, R. I., died of apoplexy, Sept. 21st, at the age of 80 years.

Dr. Capron had been in constant and active practice for more than sixty years, and worked up to the moment of the outset of his brief and painless illness, which occurred the 17th inst. Soon after he was attacked, he spoke of a paper he had just completed, to be read at the approaching meeting of the Rhode Island Medical Society, of which he was President in 1850, and always an active member. He desired a friend to convey his regards to the Fellows, and tell them he should never meet with them again.

—— M. L. A. DESMARRES, for a long time one of the most eminent oculists of Paris, died suddenly, on August 22, at Neuilly. He was born on September 22, 1810, at Evreux.

NOTES AND QUERIES.

NITRATE OF URANIUM IN INCONTINENCE OF URINE.

To the Editor of THE MEDICAL NEWS.

Dear Sir: Having lately heard of the successful treatment of an obstinate case of incontinence of urine in a child by an irregular practitioner with nitrate of uranium, would you allow me to ask through your columns if any of the profession know of its use, or have had any experience with the drug named?

Yours, very truly,
ALEXIS D. SMITH.

PHILADELPHIA, September 21, 1882.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT, U. S. ARMY, FROM SEPTEMBER 18 TO SEPTEMBER 25, 1882.

SPENCER, WM. G., *Captain and Assistant Surgeon.*—Granted leave of absence for four months, on Surgeon's certificate of disability.—*S. O. 219, A. G. O., September 20, 1882.*

BUSHNELL, G. E., *First Lieutenant and Assistant Surgeon.*—Granted leave of absence for one month.—*S. O. 147, Department of Dakota, September 7, 1882.*

HOPKINS, W. E., *Assistant Surgeon.*—Relieved from further duty at Camp Washington, Gaithersburg, Md., and will proceed to Fort Adams, Rhode Island, and resume his duties at that post.—*S. O. 168, Department of the East, September 22, 1882.*

THE MEDICAL NEWS *will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.*

Local papers containing reports or news items should be marked.

Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers—of course not necessarily for publication.

All communications relating to the editorial department of the NEWS *should be addressed to No. 1004 Walnut Street, Philadelphia.*